

building roads which provide better access to markets (with consequent reductions in transport costs) would reduce the need for families to buy food “at any price”. Reducing opium addiction would also weaken the overall bargaining position of merchants in the long run. However, these are current conditions. In the future other factors may well emerge which may cause even more adverse terms of trade.

3.4 Constructing Roads

Large undertakings such as road construction and rehabilitation are vital in all three districts to improve accessibility and communications (including for vital services such as vaccinations). As well as providing income during their construction improved roads will reduce transport costs and travel time, and should help to reduce the present dependence on itinerant merchants, especially in Wakhan.

3.5 Reducing Opium Addiction

Co-operation and endorsement

Health personnel in the districts should be involved in any initiative and their co-operation sought. Local authorities should be encouraged to control the supply of opium to the areas (not an easy task). The possible reactions of opium merchants should be thought through – they have a considerable vested interest. The endorsement of religious authorities for any initiative to eliminate addiction would also be very helpful.

Treatment of Addiction

Each district needs trained personnel who can treat addiction and support addicts who wish to come off opium. They will need clinics which have the required medicines and facilities. Supervision and support for addicts after treatment will also of course be necessary.

Reinforcing Mechanisms

Measures which improve the general quality of life for local communities should in the long term remove or reduce some of the factors which contribute to opium addiction. To be effective these measures must include improving general health and health care facilities and increasing food supply.

3.6 Improving Health

Tackling disease and poor infant and maternity care in these districts is as urgent a priority as the shortage of food; together they cause many deaths. A variety of measures are needed.

Carrying Out Vaccination Programmes

Vaccinations are the most urgently needed medical activity. Provincial and district health authorities and health-oriented NGOs will need to co-operate on a programme.

Getting Clinics Working

Health clinics need to be set up (or reactivated) in each district. They have a vital life-saving role which should be brought to the attention of health-oriented NGOs. Infant and maternity care should be high on such clinics' priorities.

Improving Hygiene

Hygiene is a matter of habit and custom. Women are of course the prime carriers of such customs, and the people on whom to focus to make changes. We would suggest training and appointing local women to act as "social change agents". They could help to design and gradually introduce to households a programme covering subjects such as personal cleanliness and food and water hygiene.

Such women would be opening up new vistas for women in their own communities; the programme could thus have more far-reaching effects on how women perceive their roles.

3.7 Education

Many people in these districts still feel very strongly about education and are concerned to see the system restored. NGOs which are experienced in education within Afghanistan should be contacted concerning the possibility of their working in the three districts. Educational initiatives should include adult literacy for women, organised on an informal, voluntary basis because of women's heavy workload.

3.8 On Emergency Food Relief

The situation in the three districts does provide grounds for some form of emergency food relief. Food shortages begin to bite in late winter and persist into the spring (until the next harvest), and can be very severe. Because it may not be possible to deliver food in early spring (due to weather conditions affecting roads) it is vital to bring food supplies into the areas before winter, preferably by mid-October.

However, we recommend food relief should be in the form of food-for-work on projects which would contribute to long-term solutions to the core problems of food shortage and food production.

BACKGROUND

1 THE ASSIGNMENT

The assignment was to carry out a Rapid Rural Appraisal in three districts of Badakhshan province in the north east of Afghanistan in the summer of 1995. This report is the result of that appraisal.

From 1995, Afghanistan committed itself to addressing the basic needs of poor people in three provinces in north and central Afghanistan: Badakhshan, Jowzjan and Ghor. Some of the poorest people of Afghanistan live in these provinces, which have long been under-served by government and other agencies. Emergency assistance and even rehabilitating the basic infrastructure are short-term solutions to the long-term problems of these rural communities. Such communities need help to find ways to meet their basic needs without outside assistance in the future. There are few if any models of how to provide this help in Afghanistan, and Afghanistan had no previous experience of "community development" approaches.

In spring 1995 we therefore designed a community development pilot project to learn how to implement this kind of capacity-building programme. We chose Badakhshan for the project because we had been working in the province and had established relationships and a good reputation.

From the thirteen districts of Badakhshan we chose Ishkashim, Sheghnan and Wakhan as possible sites for the pilot: they are some of the province's most remote districts¹, are very under-served and are extremely poor. Using Rapid Rural Appraisal techniques we carried out a survey of the three districts in order to select a site for the pilot project, and to provide information for planning a general programme of assistance for the three districts.

This report presents the findings of that Rapid Rural Appraisal. We believe it is an accurate overview of the situation and of the life now lived by the majority in these areas, reflecting the intricate patchwork of problems which affect their daily lives.

2 THE APPRAISAL TEAM AND METHODOLOGY

The Appraisal team consisted of three agriculturalists, one engineer and a socio-economist. All had previously volunteered for the community development pilot project and had been intensively trained in the approach. The team spent ten weeks, from 1 June to 8 August 1995, appraising conditions in Wakhan, Ishkashim and then Sheghnan districts. During the survey of Sheghnan, Sepideh Azarbaijani-Moghaddam, a Farsi-speaking woman from England, joined the team to gather information about the lives of women.

Following RRA techniques², the team met a wide variety of key informants: village elders, people on their fields, shepherds, village representatives, religious leaders, educators, teachers, doctors, shopkeepers, tea shop customers, passers-

by as well as local authority officials. The team talked to the old, the middle aged and the young. They visited all villages in Wakhan (except Major Pamir) and most villages in the other two districts. The team were unable to visit the Major Pamir because of heavy snows.

For all districts the team were:

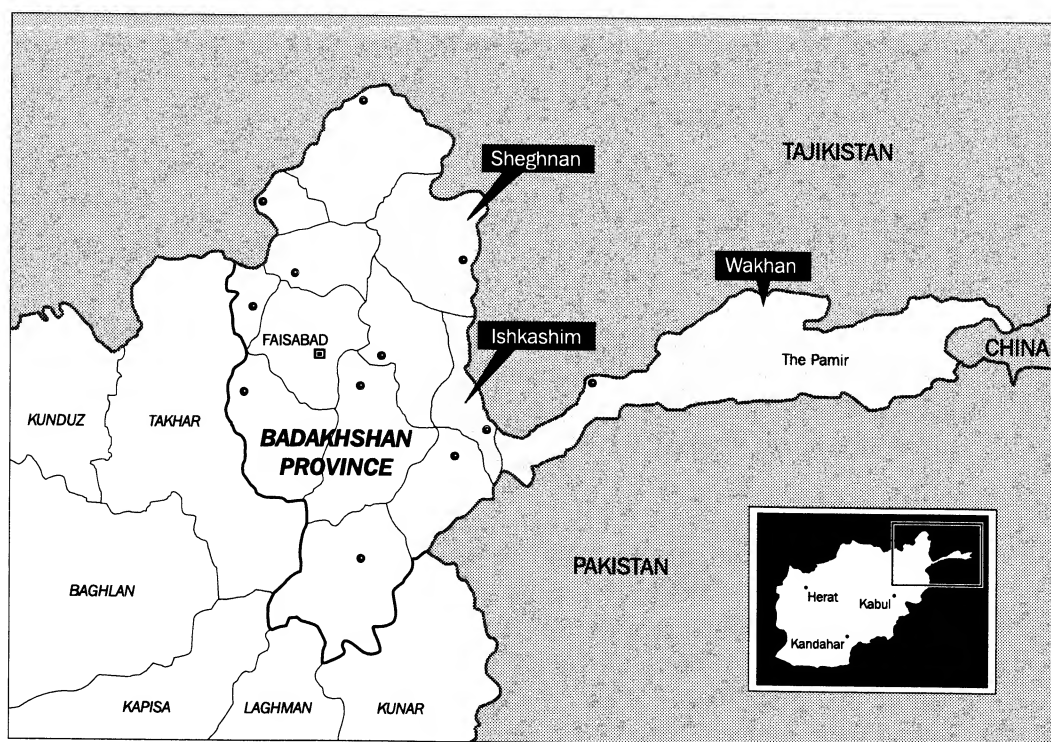
Haji Ghulam Sarwar Haider (Agriculturalist)
 Hamidullah Natiq (Agriculturalist)
 Sayed Mahmood Zabihullah (Engineer)
 M. Saeed Mokhtarzada (Socio-Economist)
 Hayder Mohammad Waheed (Agriculturalist)

For Sheghnan the team also included:

Sepideh Azarbaijani-Moghaddam (Student of Development Studies)

The main body of this report was written by M. Saeed Mokhtarzada, the farming appendix by Hamidullah Natiq, Haji Ghulam Sarwar Haider and Hayder Mohammad Waheed, and the appendix on roads and engineering by Sayed Mahmood Zabihullah. The report was edited by Peter Murray.

3 THE DISTRICTS



3.1 Location and Access

Badakhshan, in the north east of Afghanistan, is the country's most remote and inaccessible province and Ishkashim, Sheghnan and Wakhan districts, in the north east of Badakhshan, are among the province's most remote and inaccessible districts. Until Afghanistan completed the first road to the district in August 1995, Sheghnan had no road link with the rest of the province, and still has no road to the district centre. There is one road to Ishkashim, which also runs

through the district to the centre of Wakhan, but numerous rivers and flood beds regularly cut off Ishkashim and Wakhan for prolonged periods each year.

This inaccessibility and remoteness affects all aspects of life in the districts, and are crucial to understanding the problems people face there, including lack of access to health facilities, higher education, and to markets; neglect by government authorities; and very high transport costs.

3.2 Natural Features

The three districts are very mountainous with high-sided, high-altitude valleys and many rivers and creeks. The Amu Darya, one of Afghanistan's most major rivers (locally also called the *Panj* river), originates from Pamir in Wakhan. Most valleys in the 300 km east-west stretch of Wakhan are less than one kilometre wide. Ishkashim branches in two directions from its centre, east-west and north-south, with a river running in each direction and villages evenly distributed between the two areas. Sheghnan's villages are mostly located along or near the Amu River in a north-south direction, flanked by mountains to the west and the Amu River to the east. Sheghnan also contains the famous Shewa pastures and the mysterious Lake Shewa (about 4-5 sq. km.).

Snow-capped peaks and meadows are the usual scenery, dotted with bushes and some wild plants. Wildlife include mountain lions, tigers, wolves, rabbits, bears, an animal locally called *ondook* (something between a coyote and a fox, but with short forelegs and an ability to stand on its hind legs), deer, the famous marcopolo (in Wakhan) and partridge.

The climate in the districts is cold and severe (temperatures in Ishkashim range from -26 °C in the winter to +28 °C in the summer with an average for the coldest winter months of -12 °C , according to data from one metrology station). There are heavy snows in winter; summers are mild.

Conditions vary from village to village as well as from district to district. While there is sufficient agricultural land in Ishkashim, irrigable lands are in short supply in Sheghnan and non-existent in parts of Wakhan. The soil quality is generally poor, again with the exception of parts of Ishkashim.

The Pamir

More than half of eastern Wakhan consists of the Pamir, which is so different from the rest of Wakhan that it needs a separate description. It is above 3,500 m in altitude and local people proudly call it *Baam-e-Dunyaa* (roof of the world). It consists of the Major or Great Pamir (*Pamir-e-Kalan*), its northern strip, and the Minor or Small Pamir (*Pamir-e-Khord*), its southern strip, hence the use of the plural form by local people. Conditions are not suited to agriculture but the area has extensive pastures. Only small, bush-like trees grow in the Pamir.

3.3 Population

The districts are sparsely populated (population density is among the lowest in Badakhshan). District authorities gave population figures of 9,000 for Ishkashim, 35,000 for Sheghnan, and 15,000 for Wakhan. Estimates of population changes by

UNIDATA³ using projections from 1979 Government statistics show the following figures:

	Area in km ²	Population			People per 1 km ² (1979)
		1979	1990	1995	
Ishkashim	4,298	7,286	9,010	9,888	2
Sheghnan	3,784	18,241	22,558	24,757	5
Wakhan	11,770	9,178	11,350	12,456	1

Only two other districts, Zebak and Keran-o-Munjan, showed such low population densities in 1979⁴. By comparison, population densities at that time in Faisabad were 47, Ragh district 38, and Shahr-e-Bozurg district 32 people per square kilometre⁵.

The Pamir

The Pamir are particularly sparsely populated. The Major Pamir currently has 135 households and the Minor Pamir has 103 but seventeen years ago the population was much larger. After the communist regime came to power in 1978, Rahman Qol (a famous Bay, or lord, of the Minor Pamir) migrated from the area with 500 families, first to Pakistan and later to Turkey. After the Soviet withdrawal some families began to return from Pakistan. But neither the area’s human nor its livestock population has so far recovered to their past peak.

3.4 Ethnic Composition

The people of the three districts are predominantly Tajik. Dari (Farsi) is the language commonly spoken although each district also has its own mother tongue (and variations on it). For instance, Sheghni is a separate dialect which is unintelligible to people in other districts or elsewhere in Afghanistan, but is understood across the border in Tajikistan. Most women in the districts do not speak or understand Dari, especially in Wakhan. Girls who go to school learn Dari but unless they subsequently become teachers or government clerks (which is very rare now) they will hardly use the language, and will lose it.

Most people in the districts are followers of the Ismaili sect (with the exception of those in the Pamir). Those who are not Ismaili have generally moved into the area from other parts of Badakhshan or Afghanistan and are Sunni Hanafites, the dominant Muslim sect of the country. Senior government officials in Sheghnan are mostly Sheghni (original inhabitant of Sheghnan), but in the other two districts are generally from other parts of Badakhshan and are said to display some contempt for the local population.

Literacy rates and education levels appear to be highest in Sheghnan, followed by Ishkashim and Wakhan in that order.

The Pamir

The inhabitants of the Pamir are Kirghiz and speak Kirghizi. Pamirees also speak Dari and Wakhi despite their not being used locally. They have learned the languages through contact with people from Wakhan and with itinerant merchants. Women are much less likely to speak these languages. Literacy is

negligible among the Pamirees. A few wealthier families do manage to have their children learning to read the Quran, and some of them become semi-literate. Being Kirghizi, the Pamirees are Sunni Muslims (the rest of Wakhan is Ismaili).

Pamirees are pastoral people, living by animal husbandry and its products, including dairy products for domestic use and for sale and trade. The Pamir exchanges livestock (sheep, goats, yaks), hides, wool, cooking oil and whey to obtain all its needs, which are supplied by itinerant merchants.

¹ Other remote districts are Ragh, Darwaz, Khwahan, Shahre-Bozurg and Keran-o-Munjan.

² The principal methods used are semi-structured interviews and observations, using a pre-prepared checklist of topics. Topics are approached according to the interest and knowledge of interviewees; any which they bring up are explored.

³ The figures show an estimated increase of 23.66% in the population of the three districts between 1979 and 1995.

Figures for 1979 are taken from Government statistical sources by UNIDATA. UNIDATA has assumed a 1.95% population growth rate over the eleven-year period 1979-1990, arriving at the figures shown for 1990 (UNIDATA, 1992 AFGHANISTAN-BADAKHSHAN PROVINCE: A SOCIO-ECONOMIC PROFILE, pp. 3,9, and 13-14).

The increase of population between 1979 and 1990 is 23.66%. Using the same rate of increase the population for 1995 for the three districts can be calculated as indicated (this simple calculation will be satisfactory for a short period of five years; for longer periods it would not be accurate).

⁴ Density figures will be slightly more for other years (the original source does not show the population densities for 1990).

⁵ UNIDATA, Page 9

FINDINGS

1 MAKING A LIVING

1.1 Sources of Income

Agriculture and animal husbandry have traditionally been the main sources of income in the districts. They are still the most reliable, enduring and significant income earners. Because of its high altitude the Pamir has no agriculture and depends solely on animal husbandry. In all three areas the climate and altitude dictate what can be produced.

Other sources of income include selling timber, selling fuel-wood, handicrafts, government employment, and employment elsewhere in Afghanistan or Pakistan. Many families use a combination of these sources, all of which are limited and to different degrees unreliable.

1.1.a *Agriculture*

Agriculture is the main occupation in Ishkashim and Sheghnan and includes grain and fruit production. All crops are used locally, most of them for private consumption. Sheghnan does export dried walnuts and mulberries to other districts. Ishkashim produced surplus grain fifteen years ago and was the granary for its neighbouring districts but now imports food, as do the other two districts.

The agriculture in the districts is predominantly irrigable and is very vulnerable to frequent droughts, severe winters, untimely frosts, pests and locusts in the high-altitude environment. With the exception of Ishkashim, agricultural land is in short supply, the soil is not very fertile and the holdings are mostly small.

Declining yields are a common complaint, particularly in recent years. Wakhan and Sheghnan are both chronic food deficit areas. As agriculture cannot provide food for the full year in any of these districts, people depend on animal husbandry, the other main activity, to make up the shortfall.

1.1.b *Animal Husbandry*

Animal husbandry is the second major occupation in Ishkashim and Sheghnan and the main occupation in Wakhan. It provides a relatively reliable income. Families raise and keep sheep, goats, cows, donkeys, some horses, and yaks (in Wakhan and Pamir only). People use animals for household needs as well as rearing them for sale. The products of animal husbandry include milk, butter, yogurt and cheese, whey, cooking oil, hides and wool (the latter four are also sold).

In Wakhan, the natural and climatic conditions favour animal husbandry more than agricultural activity and the inhabitants of Wakhan raise and keep livestock as their main occupation. There is scope to increase animal husbandry in Wakhan, unlike its agriculture which is limited by climate, soil quality and available land.

However, in all three districts the expansion of animal husbandry is constrained by disease, severe cold, insufficient winter fodder, and the lack of winter sheds. The high demand for household consumption and the pressures to sell livestock to buy food and other basics (compensating for the inadequacy of cultivable agriculture) also reduce, or limit the numbers of livestock people can keep.

1.1.c Timber

Timber is used and sold locally but supplies are very limited in all three districts. Timber is available in some of the more accessible villages of Wakhan and most of Ishkashim, from where it is transported to Baharak and even Faisabad for sale. Timber cannot be transported out of Sheghnan because there is no road in the district and because of difficult passes along the foot trails. People are currently cutting down trees faster than they are replacing them, and are using trees for household fuel as well as timber. Timber is thus a limited source of income, which is currently not sustainable.

1.1.d Handicrafts

Families make many of their own clothes and household goods, including woollen *gleem* (a sort of coarse rug also called *plaas*), felt rugs, knitwear, *taan* (a fine, thick and soft woollen cloth made only in Sheghnan) and some embroidery.

Some of these items are made for sale as well as for home use. For instance, the *taan* cloth made in Sheghnan is turned into vests and coats and into *chakman* (a famous long coat with long sleeves). Much of the work involved is laborious, and most of these products require wool as their raw material, some in great quantities.

“A family will have to save the wool of several sheep (or goats) for two years to have enough wool to weave one gleem,” we were told. (A sheep gives an average 1.2 kg of wool per year.)

The income potential of handicrafts is limited both by the supply of raw materials and by market factors. As the numbers of livestock are severely constrained in most areas (see Animal Husbandry above) so therefore is the wool supply. From the livestock they do have available, families also have to meet their domestic needs for wool before producing for sale.

On the market side, products from these districts have to compete with similar products from other parts of Badakhshan. The *taan* cloth is unique to Sheghnan, but this cloth and its products are expensive¹ and few can afford them. Even if raw material supply were increased, and training and thought had gone into producing attractive and marketable handicrafts, lack of (general) purchasing power would continue to be a constraint on this source of income.

1.1.e Government Employment

For more than ten years the previous, communist regime recruited heavily from the populations of these districts for military services, officer corps, nationality regiments, border guards, party cadres and clerk posts etc. Not only did this bring significant income to the areas, but many government employees also received a monthly food coupon² and other occasional items at highly subsidised prices or even free. This system had been set up in Badakhshan and elsewhere

long before the Communist regime, who, shortly before their collapse, increased salaries in an unsuccessful attempt to cover the loss of the wheat which they knew would follow. The system broke down completely when the Mujahedin came to power in 1992.

There are now only a few teachers, government clerks and militia employed in the area, but they are paid very irregularly and inadequately. In the last four years only seven-months worth of “government” salaries had been paid in Wakhan district. For the first time in sixteen months, money for salaries had reached Ishkashim in July 1995 but only covered some of the unpaid salaries for the period. There were similar delays and problems with salary payments in Sheghnan.

It is little wonder local people look back to the days when, it is said, most families had at least one person in government employment. There is no prospect in sight of government employment bringing significant income to the districts.

1.1.f Other Local Employment

Some people work locally for others as share-croppers or shepherds. This is a long-standing tradition, and the work is fully taken up. Limits on the land available and constraints on animal husbandry currently prevent any significant increase in this employment.

Collecting and selling wood for fuel in the markets of Ishkashim and Sheghnan is another source of income, which is minor and sporadic.

1.1.g Work Outside the Districts

Badakhshis have long been used to migrating to find work in nearby Takhar and Kunduz provinces, especially on a seasonal basis. It is difficult to predict trends. Sheghnis also work as teachers and government employees both in other districts of Badakhshan and in other provinces.

An entirely new development is the “invitation” extended by Mansoor Naderi, leader of the Ismailis in Afghanistan, to 500 families for them to leave Sheghnan to settle in Pul-i-Khumri, Baghlan province. Naderi provides land, some cash and other items to start the families off. Some Sheghni men had left on their own to explore the possibilities in Baghlan, intending to bring their families later if things worked out.

These opportunities provide only a limited and uncertain income. More recently, many men have been trying to migrate to Pakistan, where the pay is 30-50 Pakistani Rupees per day for mostly hard manual work. It is possible for men to work in Pakistan during the winter and carry out their farming work in Badakhshan for the rest of the year. Wakhan sent the largest number of such migrant workers followed by Ishkashim and Sheghnan.

Work outside the districts reduces the number of people each village has to feed and eases the pressure on local food supplies. The current numbers and patterns of people working away from the area does not seem to affect local outputs significantly.

EXECUTIVE SUMMARY

This report presents a summary of the findings of a rapid rural appraisal of Ishkashim, Sheghnan and Wakhan districts in Badakhshan province, Afghanistan, carried out by Afghanaid in mid 1995. The survey was part of our renewed drive to help Afghanistan's poorest rural communities meet their basic needs. It has provided detailed information through which we have been able both to plan a general programme of assistance for those districts, and to select the site for a community development pilot project which began in September 1995.

Communities in all three of these districts face severe hardships from a range of serious problems. Most families in the districts are finding it very difficult simply to meet their basic needs. None of the districts can produce enough food to feed their populations. We estimated that in average years Ishkashim has a two-month food deficit, Sheghnan a three-to-four-month deficit, and Wakhan a five-to-six-month food deficit. Yet there is little scope to generate income with which to buy in food; and imported food is very expensive because of the high cost of transporting it to these remote and inaccessible districts.

Until Afghanaid recently completed a road, Sheghnan had no road link at all to the rest of the province. And the one road linking Ishkashim and Wakhan to the province is regularly cut off by rising rivers and snows. When winter supplies run out, people may face many days of walking through snows and blizzards merely to fetch what food they can carry on their backs. Death by starvation is an ever present spectre for families in the districts, and takes its worst toll in early spring when supplies have run out and crops have not yet ripened.

There are few if any medical facilities. Many babies die at or just after birth. A measles epidemic had been killing scores of people in Wakhan for seven months before health authorities in the provincial capital, Faisabad, even found out about it. They said they could do nothing in response, giving the district's remoteness as the reason. No vaccinations have been carried out in the districts for several years.

The lack of medical help is one reason for the very extensive opium addiction in the area. Opium is used from infancy as a painkiller and cure, "the cure that is in itself a disease," as many local people describe it. We estimate that there is at least one addict in half the households in Wakhan, and in two fifths of households in Ishkashim and Sheghnan. Each year one addict in an average ten-to-twelve-person household spends on opium at least the equivalent of what it would cost to provide wheat for the whole household for three to four months. There was little or no treatment for addiction available in the districts. Most people we spoke to were keen to eliminate opium addiction and said they would support initiatives to do so. Only a little opium is grown in Ishkashim for personal use, but none is grown in Sheghnan or Wakhan.

The urgent priorities that communities expressed were for roads, tackling health problems, food, and treating opium addiction. The order varied but the same needs were expressed village after village.

1.1.h The Opium Trade

This illegal trade has been carried on in its present state for about four years. Very little opium is produced in the three districts. After the Mujahedin came to power in 1992 an opium trade route to Tajikistan started through Sheghnan and to a lesser extent through Ishkashim (but not through Wakhan). The trade increased when the former Soviet Union disintegrated. Merchants (who are not locals) bring opium resin to the area. A small number of usually young swimmers (mostly Sheghni and called *tajavuzi*) carry opium resin across the Amu River at night into Tajikistan. Everybody, including the authorities, knows about this trade, which only provides employment to a few.

1.2 Major Expenditures

Major household expenses are:

1. *Basic consumption*, food, clothing, shelter and household belongings.
2. *Farming maintenance costs*, such as providing seed for the following year's cultivation and other expenses associated with maintaining agriculture and animal husbandry.
3. *Ceremonial costs*, weddings, funerals, community festivities and obligations (taking part in shared work, sharing in the costs of a mosque) etc.

(1) and (2) can be considered as replenishment expenses, necessary for the continued survival of households. Expenditure (3) is needed to maintain the village community as an entity. The three expenses together form the core expenditures necessary for the survival and continuation of village society.

4. *Government tax* of 10% (Sheghnan is exempted), collected as a tithe (or *oshr*, meaning one tenth in Arabic). This is a religious obligation to the treasury levied after Mujahedin rule and is therefore a relatively recent expense.
5. *Religious tribute* of 10% submitted to the Ismaili religious leader of the area out of devotional obligation.

Government and religious taxes are paid in kind from the harvest and/or from livestock.

6. *Opium addiction* was said to account for one fourth to nearly half of an addict's household expenditure (see Opium Addiction below). Addiction was said to affect from one third to two fifths of households in Ishkashim and Sheghnan and more than half the households in Wakhan.
7. *Transportation* is a high cost to the communities, both in cash and in time. For example wheat in the capital Faisabad cost 5,000 Afs per seer (7 kg), in Ishkashim 6,500 Afs, in Khandood, Wakhan, 9000 Afs, and in Sheghnan 12,000 Afs. In the summer the round-trip from Sheghnan to Ishkashim takes six days by horse and longer on foot, the usual means. In winter the trip takes much longer and can be very difficult and dangerous.

Households can only directly control the first three items of expenditure: basic consumption, farming maintenance costs, and ceremonial costs. Other expenditure is outside their control. People did not generally see the cost of

opium addiction as discretionary expenditure unless close medical supervision was available.

1.2.a Terms of Trade

Many people complained of a decline in their purchasing power, which was making goods more and more expensive for them. Their concern about worsening terms of trade seemed justified, particularly in Wakhan. The poor and remote have little bargaining power, and cannot buy in bulk. Their alternatives are either to make regular trips to distant markets, each involving several days of arduous walking, or to postpone their purchases, or to go without.

1.3 Making Ends Meet

It was clear from our discussions that most people are experiencing great difficulty in meeting their basic needs. Through declining crop yields and loss of government jobs, families' incomes have reduced and cannot meet rising demands. Worsening terms of trade are one of the pressures on income. Population increase is another. People often said that their problems are compounded by there being more mouths to feed and by more people living under one roof than in the past (people usually gave precise figures about their households).

1.3.a Population Pressures

The population increase is partly caused by the loss of government jobs. Many people used to work in government jobs outside the districts, sending some of their income back home. Now, not only has the income from those jobs gone, but some of those former government employees have returned. Their villages must now feed them out of their shrunken income and existing food stocks. Nor can many of these "returnees" contribute much to agriculture and animal husbandry: the districts had adjusted and managed without them; there is little spare land or livestock to work with; and some returnees, who have tasted a different life, are reluctant to take up farming again.

The increase in population in many parts of the area we surveyed puts pressure on all existing resources: cultivable land, water, housing, and the scant education and health facilities. Communities in the districts are ill-equipped to respond to these pressures because of their limited technology and skills. Their past experience offers them few if any solutions for this new development.

1.3.b How People Manage

Given the present constraints, people have little scope to increase their income and are therefore forced to reduce their expenditure. Of the seven categories of expenditure listed above, households can only directly control their expenditure on basic consumption, farming maintenance (eg seed for planting) and ceremonial and community obligations. However, the first two are already at their minimum levels (the third is occasional and more discretionary). Most people we spoke to regarded expenditure on opium as beyond the addict's control unless close medical supervision was available (see Opium Addiction below).

The result of these pressures is that families end up eating the seed they should be planting next season, or, most commonly, balancing their budgets by going hungry – a strategy such communities have adopted for centuries.

Other ways of getting through the many hard times include borrowing, mortgaging land, and selling it if the debt can't be repaid, and selling household belongings. We heard of cases where people became share-croppers on land they had previously owned or where they became share-croppers on their own land after having to borrow seed to plant it.

Finally the very poor have *dar ve zah* to resort to, going from door-to-door to collect food. Families may have to do this for several months of the year. The village considers it an obligation to feed them:

"It will be a great embarrassment if other villages hear that a person died in a village from hunger," we were told.

Occasionally one family provides these poor families a few full meals each month. We were told that four to five in every hundred families have to resort to *dar ve zah*.

Case Study

Fifteen-year-old Jamhoor Shah, from Wirk village in Wakhan, was pulled out of school in his fifth grade last year to work as a shepherd after his family began facing severe difficulties.

The family's problems became serious when eight animals died (bulls, cows and an ox), and at the same time they had to meet the expense of his older brother's wedding. The wedding cost 12 lak (1,200,000) Afs in cash, plus one oxen and one cow. They sold a horse for 5 lak Afs to help meet the cost. Their resources were already strained because yields the previous year had been low and they had eaten their planting seed. They had to borrow seed for planting this year and also had to borrow oxen to plough the land (one ox had died and one had been given away as dowry). Jamhoor's married brother had gone to earn money in Pakistan and their father, Mohammad Shah, was working their land but will have to split the year's produce with the villager who provided the seed and draught animals.

Last year his father had assigned Jamhoor to Ghulam Shah, a relative in Sayaad village, Ishkashim. Jamhoor received 210 kg of wheat for eight months work (about 180,000-200,000 Afs). He returned to his family for the remaining four months. This year Jamhoor has been working for another family which his father knows in Sokmal village, Ishkashim. He is looking after 16 livestock belonging to three brothers and receives 10,000 Afs per month for eight months of the year – less than last year, but he says the work atmosphere is better. He eats with the family.

Jamhoor doesn't think he will be going back to school unless military conscription forces him to enrol in order to evade the draft. His father is an opium addict but we were told that so far none of the children had become addicted. Several times Jamhoor said that they would be much better off if it was not for the opium. When we asked him why his father, who knows this, does not quit, he said "Because he can't; you see he is a Khalifa [religious man of the village]." When we asked him what difference that made, he said, "You see he has

to speak on some occasions, including weddings and funeral ceremonies. If he stops taking opium his voice will be affected and then it won't look good."

2 FOOD AND NUTRITION

Basic consumption – food, clothing, and shelter – is a key indicator of a community's standard of living. In subsistence economies food becomes the single largest item of expenditure, and the food consumed the single most telling indicator of living standards. In spite of being some of the least populated districts of the province, none of the three districts can produce enough food for their inhabitants, who at times experience very severe shortages. Ishkashim has the lowest food deficit and has the most immediate potential to meet its own needs. Animal husbandry is the chief means of making up the food deficit in each district, and the only means of securing food in some parts of Wakhan.

2.1 Diet and Nutrition

Because available food does not meet the needs, families spread food thin to cover the different meals of the day. For most people in the districts these are the main foods:

Gard-aabeh, literally meaning watery powder ("which just silences the stomach," said some), *atalah*, and *aash*. All three consist of grain flour (wheat and or horse beans) boiled in water. The first is dilute, the second thicker and the third like soft porridge.

Wheat bread is not eaten as much as required because wheat is scarce. Wheat purchased and used in Wakhan was full of weeds, earth and gravel. There was no bakery in Khandood, Wakhan's district centre, but were bakeries in Ishkashim and Sheghnan district centres. People make wheat go further by mixing it with other grains such as barley, millet, rye and *patek* (vitch), and by cooking it in dilute forms.

Beans: green beans, horse beans and *patek* are also cooked and eaten separately. *Patek* (vitch – *Lythous sativas*) can cause partial paralysis if it is not cooked properly to remove the poison on its skin. This is widely known in Badakhshan and we heard of cases of paralysis in Wakhan but not in the other two districts.

Rice: the majority do not eat traditional rice, although it is a favourite Afghan meal. As with wheat, people eat rice when it is available, in a diluted form known as *brinj-aabeh* ("watery rice").

Dairy products including milk, yogurt, cheeses and whey.

Meat is consumed in small quantities, partly because livestock have to be traded to obtain other basic foods such as wheat. Families rarely eat meat in the summer because it cannot be preserved after slaughter but do eat meat during the long winter months when the cold provides natural refrigeration and enables the meat to be used over several weeks.

Vegetables and fruits were mostly absent from the diets of the Ishkashimi and Wakhi. Sheghnis ate very few vegetables but did eat some fresh fruit in the

summer and dried fruit in the winter. We occasionally saw potatoes in Ishkashim.

Mulberries: These are a staple food in Sheghnan, eaten fresh and dried. Women gather mulberries from the ground under trees (often while they are weeding) and dry them on specially prepared roof-tops. They mill the mulberry, using mills similar to wheat mills but with half-sized stones, and store the milled mulberry in bins for autumn, winter and spring. The milled mulberry (called *talkhan*) gradually becomes a semi-solid bulk in the bin and has to be chopped off with a small axe.

Other plants eaten include wild sesame and *chokree*, a plant similar to rhubarb. *Chokree* is pulled out from high hills, dried in the sun, mixed with a little wheat (to enable milling), and then eaten preferably with milk and, if not, with water. This is only eaten in any quantity during food emergencies. We were told people were eating *chokree* in the spring of 1995:

"...when everything we had to eat was finished and the Shewa road was still blocked by snow." (The road became passable in late June.)... "The other time people ate this plant in any quantity was in 1947 when there was a severe drought," said Sayfullah, a 75-year-old former government storekeeper from Behshar, district centre of Sheghnan.

Sugar is not consumed and could not be found in the main markets in Wakhan or Sheghnan. We found a little sugar in Ishkashim. Only the very wealthy use it.

Salt comes from the province of Takhar to the west. Takhar has two salt mines. One is to its south-east at Chaal and has a clean white salt, which is not allowed to reach Badakhshan. The other salt mine is at Kalafgan, along the only road to Badakhshan, which produces a poor quality, orange-brown salt. The better quality and more expensive white salt can occasionally be found in Faisabad.

Drinks: Badakhshis are heavy drinkers of black tea. There is also the popular Badakhshan drink of *shor-chai* (salt tea) a heavily boiled mixture of black tea, a little milk, and salt.

Poor diet not only makes people in these districts susceptible to disease, they told us it also affects their behaviour, making them weak, apathetic, obsessed about food and with filling their hungry children's stomachs. One woman in Sheghnan told us:

"We try to keep as much of our wheat as possible unmilled because that way when our children demand bread we can tell them we don't have flour."

In essence people eat whatever is edible, cook whatever can be cooked and endure what they must as a result, including the possibility of paralysis.

2.1.a Levels of Malnutrition

We were not able to gauge accurately the extent of malnutrition but we saw more skinny children and adults in Wakhan than in the other two districts. Diets are worst in the winter. In areas of Sheghnan, for instance, some families live for months almost entirely on dried mulberries, until that too runs out.

The doctor in Ishkashim had been charting malnutrition among children. He said he had been seeing young children whose weight was 60% of the “normal” weight for their age, or less. He showed how it was possible to distinguish on his chart three categories of malnourished children, degrees one to three (the latter being the most acute). He added that in the year to 20 March 1995 he had documented 58 cases of degree three (severely) malnourished children. In the four months from 21 March 1995 he had already recorded 59 severe cases. In the doctor’s view, “The hunger situation is getting worse.”

2.2 Food Security

Badakhshan is documented as a food-deficit province. Only the degree of deficit changes from year to year. We estimated that in years of average yields Wakhan has a five-to-six-month food deficit (638 metric tons), Sheghnan a three-to-four-month deficit (693 metric tons) and Ishkashim a two-month deficit (95 metric tons). Ishkashim may not face a grain deficit in years of good harvest (although for the past fifteen years it has not produced a surplus). These deficits have to be made up by food from outside the districts. People are most vulnerable in the spring, the “hungry season” when winter supplies have run out and the current year’s crops and fruit have not yet ripened. Transport is therefore a vital factor in food security for all three districts.

2.2.a Food Production

To calculate food deficits we obtained information from farmers and other community members in different villages concerning:

- yields per jerib (0.2 hectare) and size of holdings;
- how many months a household’s own produce lasts;
- the number of months for which families have to buy grain to meet shortfalls;
- how the deficit is funded (selling livestock and livestock products was the most common).

We had to sift the information for exaggeration (in the hope of obtaining immediate assistance) and compare it with what we saw of agricultural practices and holdings.

Wakhan: Even the best harvests will not produce more than eight months of the district’s food needs (mostly grain needs, and it is usually wheat which is purchased). This means that Wakhan can only produce about six to seven months of its food from its own agriculture.

Sheghnan is the most populous of the three districts. Its climate is generally favourable to agriculture but because of land scarcity it can never produce enough food to lose dependency on food purchases from the outside. In good years Sheghnan will still need to procure some three to four months of its food needs from outside the district.

Ishkashim has both more agricultural land than the other two districts, a smaller population to feed, and the most favourable climate. The district was once the granary for its neighbouring districts, Sheghnan, Wakhan and Zebak. In the past decade and half, and especially over the last four to five years, yields have been

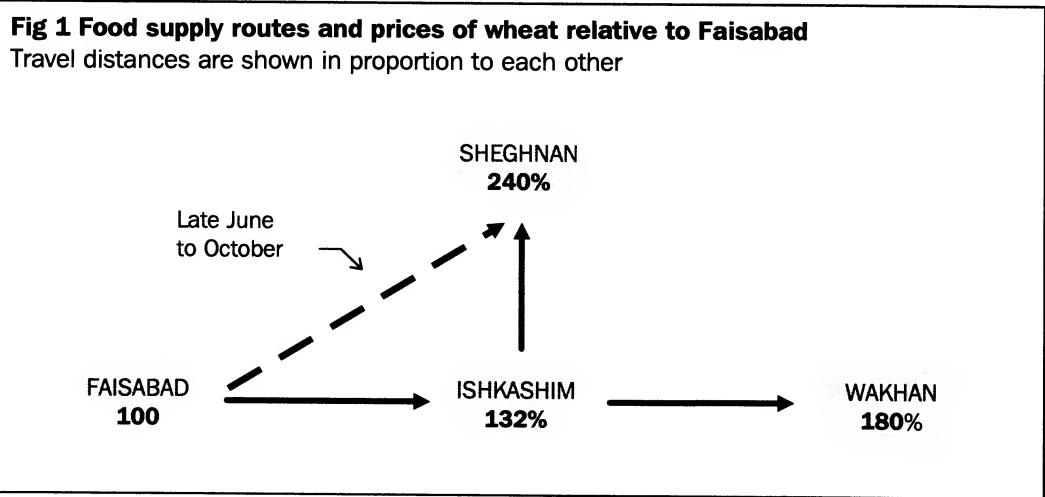
dropping and the district has become a food importer instead of exporter. In bad years the district has to procure about two months of its food needs from outside. This year, however, until 20 July 1995, when we left the district and harvest time was still some two months away, the signs were good: the climate, plant diseases and pests had not done much damage, and people were starting to express optimism about the harvest. Early frost, excessive heat, and rust could still affect the year’s crop.

2.2.b Loss of Food Coupons

The loss of food coupons for government employees has already been mentioned. We calculated conservatively that if only a quarter of the total 5,500 households in the three districts had received this coupon³, 77 metric tons of wheat would have been injected into the districts each month. This represents about half the wheat consumption of a quarter of all households in the districts – a very significant loss in a food deficit area where yields have been declining.

2.2.c Purchasing Food

Purchasing power in the districts is very low and, because of remoteness and inaccessibility, transporting goods into the districts very expensive. The result is that prices are high and little is available. The markets and shops in the district centres reflected this situation. We were surprised at the number of shops, 93 in Ishkashim and around 50 in the other two districts, but many were closed and most were only half-full when open. The shops in Khandood, Wakhan, were particularly empty and sold mainly wheat. Few shops were specialised; most sold opium. One example of the low purchasing power: we were in Khandood, Wakhan, and a donkey arrived from Ishkashim carrying two large baskets of cherries from Baharak (about 60 kg). We thought the cherries would disappear overnight, but it took four days to sell them.



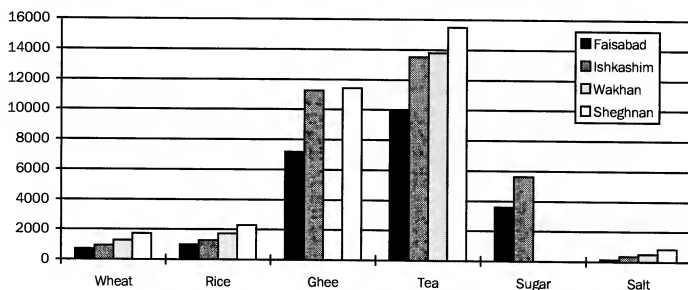
Sheghnis bring food from Faisabad between June and October, when the road is passable, and from Ishkashim for the rest of the year. Food is transported from Faisabad to Ishkashim, and from there to Wakhan. Although Sheghnan is much nearer to Faisabad than Wakhan is, unlike Wakhan, Sheghnan has no road to its district centre and Sheghnis thus pay the highest prices for food.

Snows block roads and paths from mid October to the end of March, making travel very difficult and cutting communities off from each other. Late winter and early spring are critical periods for importing food supplies; by then many families are low on food, or have run out altogether.

Prices

The price of food in the districts depends on the distance to where the food is procured, and on how difficult it is to transport the food. Comparative prices for major food items consumed by people in the districts are shown below⁴.

Fig 2 Food prices in Faisabad and the three districts (Afs per kg)



Prices can change quickly and drastically in response to road conditions. Two examples will illustrate. Wheat had been 943 Afs per kg in Ishkashim for twelve days up to 10 July 1995. Rising water levels blocked the road to Ishkashim on 13 July and the price of wheat rose immediately to 1,000 Afs, reaching 1,286 Afs per kg on 20 July. That was a price rise of 36% in just ten days (the price in Wakhan would presumably have risen proportionately). In Sheghnan, wheat had been 3,429 Afs per kg in mid spring (when food is scarcest). In late June the snow had melted, opening up the road through Shewa to Faisabad, and the price dropped to 1,714 Afs per kg by the end of July.

Everyone was most concerned about the price of wheat. Other prices did not seem to immediately fluctuate with travel conditions although we assumed they would later follow the lead of wheat. Many found the price of wheat this year "satisfactory" because it had not changed much from last year. The reason was that more wheat than normal had been brought to Badakhshan from the bread basket provinces of Baghlan, Kunduz, and Takhar because fighting had blocked the road to Kabul, cutting the provinces off from the capital's markets.

Purchasing Food in Wakhan and the Pamir

Merchants play a more significant role in food supply in Wakhan and the Pamir than in the other two districts. Wakhis and Pamirees barter livestock (most often sheep, goats, and sometimes cows) for wheat and other goods. A merchant issues a Wakhi with a slip which he redeems at the merchant's depot (often in Khandood, the district centre). When he has accumulated enough animals from the owner the merchant rounds them up, drives them to the Major Pamir for summer grazing, and then takes them for sale outside the district. The merchant

may pay the Wakhi the equivalent of 70,000 Afs per sheep but can sell them for four to six times that amount in Kabul. The journeys across the mountains are difficult, and take about two months to Kabul (to Pakistan somewhat less).

The system has some important advantages for the Wakhis: it saves them the high cost of long, difficult journeys to market (in relation to small numbers of animals and small purchases); they can barter animals rather than use cash, which they simply do not have; and the merchants give them credit. However, the Wakhis are at the mercy of the merchants, who sell high, buy low, and charge high interest rates. The merchants set prices in Wakhan between two and three times those in Faisabad and Baharak. For instance, a merchant sold a pair of rubber boots, which cost less than 14,000 Afs in Faisabad and 16,000 Afs in Ishkashim, to a Wakhi for one goat. The goat would fetch 40-50,000 Afs in Faisabad.

The merchants skilfully manipulate the terms of barter and the manner and duration of the payment, ostensibly to “suit” their loyal clients. Not surprisingly, the merchants have a powerful hold on local people, who are almost always in debt to them. Poverty forces the Wakhis to buy and to borrow from merchants; and adverse terms of trade reinforce the Wakhis’ poverty.

3 DRINKING WATER

The drinking water in most villages of Ishkashim was contaminated by animal dung and by seepage from the surroundings. Families seemed to pay little attention to the safety of their drinking water, taking it from creeks, and rivers and only, where lucky, from springs. Because of the abundant springs, most villages in Sheghnan had clean drinking water, as did many villages in Wakhan.

4 HEALTH AND HEALTH PRACTICES

4.1 Major Illnesses

The most common diseases were measles, dysentery, whooping cough, diarrhoea, tuberculosis, and intestinal and respiratory disorders. People (men) normally only suffered from malaria if they had caught it outside the districts. Rheumatism was reported as a problem in Sheghnan. Some of the older people had noticed a seven-year cycle for measles outbreaks.

What appeared to be a measles epidemic had begun in Wakhan in November 1994 and had killed many people. The worst-hit village was Sarhad-Broghel, with 57 deaths among its 47 households.

“We all accepted our end. No one knew who would be next. We thought that we would perish,” said Khojam Birdee, the village chief, who lost his sister, her son and daughter aged six and three, and his own one-year-old grandchild.

In the Minor Pamir, 90 people died out of 103 households; in Kip-Kot village 16 people died out of 18 households (176 persons); in Krot village 32 died out of 27 households (256 persons). The less remote villages of Wakhan had been less affected. While we were there in mid June 1995 the disease was receding.

We found our visit to Wakhan in the midst of this tragedy an agonising experience. We were asked for help and medicines, and could offer none.

4.2 Infant and Maternal Mortality

Women give birth with the help of traditional birth attendants (*mamenaf*, *dayeh*), who are untrained but experienced. They are paid in kind. Many women said that after the first few births they became used to the pain and wouldn't call anyone out unless they ran into difficulties. In most places there was no professional medical help available. The doctor in Ishkashim told us that he thought it was a miracle that infants survive in the numbers they do or that more mothers do not die.

The average age at which a girl gets pregnant is around 16 in Sheghnan (slightly higher in the other two districts), and she would commonly expect to lose her first two children⁵. It is not unusual for infants to die during or immediately after birth. In Arakht village, Sheghnan, we learned of one woman who had had ten children of whom only one survived, and another who had had 21 children of whom four survived. One problem which kills many babies soon after birth in Sheghnan is *kam-gereftegy*: six or seven days after birth apparently healthy babies become ill, their faces and/or back turn blue-black, their mouths fill with blood and they die. The problem may be congenital and related to in-breeding.

Women often have ten children but surprisingly few women seemed to be dying during childbirth. For instance, in Sar-Cheshma village in Sheghnan (48 households), the women could only think of one or two mothers who had died giving birth in the past year. There were five or six birth attendants in the village, and the women were confident that they could deal with problematic births. However, in other villages in Sheghnan (Dehshar, Dehmurghan and Arakht) there were no birth attendants and older women would be called upon to help. If there were any problems at these births we were told the babies would die. We found that many villages in all three districts were short of traditional birth attendants.

If a baby is not born normally or dies before leaving the womb then it is pulled out; during the process the baby may become dismembered. When asked what the women do then, they laughed and said, "We pull the bits out! What do you think we do?" This was said in a group of women who included some in their first pregnancy. They were all smiling and seemed unconcerned. Nevertheless, however hardy and brave they may be some women must suffer terribly at childbirth. We were told of a few women who had committed suicide by taking opium overdoses rather than face having more children.

Pregnant women rest, at the most, seven days before and seven days after giving birth.

4.2.a Child Care Practices

Mothers wrap their new-born infants in a cloth on which they spread powdered sheep dung (*sargin*) for insulation. Older women of the family and the mother insist on the practice, which is continued for between six and forty days. The babies are also often rubbed down later with animal fat for warmth.

A long-term programme which tackles the root causes of these communities' problems would be feasible and would make a big difference to the lives of people in the districts, improving their food security and health, and reducing opium addiction. This report provides the basis for such a programme.

A custom peculiar to Badakhshan (and to the Panjshir and parts of Parwan) is an ingenious device for keeping infants and their cribs dry (which is very important in a cold climate where people cannot afford much clothing). A hollow instrument made from walnut (*shufchak*), shaped like a Western smoking pipe but with minor differences for girls and boys, is strapped to the infant's genitals and placed through a hole in the crib, directing the baby's urine into a pot placed beneath. The arrangement forces babies to lie flat on their backs.

Further study of infant care practices is needed.

4.3 Health Practices and Sanitation

In the summer the majority of people rarely wash themselves or their clothes. Water was quite plentiful but we were told that soap is either unavailable or too expensive, and that it is impractical to wash clothes during the summer when people are working hard and clothes get dirty quickly (many people have too few clothes to be able to change them). Some people told us they couldn't be bothered to wash, they had nothing to live for. Girls who attended school and their women teachers appeared the cleanest people we saw in Sheghnan.

The doctor in Ishkashim confirmed our concern and said that when people do wash it is generally without soap and often where the livestock are kept. We saw latrines in some villages in Sheghnan, but not elsewhere. We were twice infested with lice during overnight stays in the Pamir and in Sheghnan.

Given how little people wash, the customs of sharing plates and bowls of food, of eating by hand, and of not providing separate facilities for the sick must all add to the spread of disease.

4.4 Medical Assistance

Wakhan has absolutely no medical assistance. The "measles" epidemic had started there in November 1994 and it had taken seven months and scores of deaths before the Health Department in the capital Faisabad even found out about the problem. When they did learn of it, their response was that they could do nothing⁶.

Unlike Wakhan, the other two districts do each have one doctor⁷. There are clinic buildings in Ishkashim and Sheghnan but they have no facilities. The clinic in Ishkashim has a nurse as well as a doctor and receives some medicines and compact biscuits from WHO and UNICEF in Faisabad. There was a small repair shop in Ishkashim which sold medicines and an even smaller shop which sold medicines in Sheghnan. No medicines were available in the markets in Khandood, Wakhan's district centre.

The doctors in Ishkashim and Sheghnan told us that when the medicines they prescribe cost more than about 2,000 Afs local people usually don't buy them (a bottle of medicine for measles cost 7,000 Afs in Sheghnan last winter). Someone in the family may also tell the patients, especially pregnant young women, that the medicines will harm them, and they don't buy them.

Nevertheless, the majority seemed to prefer imported cures and injected medicines. A few people in Sheghnan knew about plants with medicinal

properties: *sepand* (wild rue), which can be used as a disinfectant or antibiotic if the sap is added to warm water; and *zard sarak* which is a powerful cure for diarrhoea and other stomach disorders. Both grow wild. The other major cure widely used is opium, “the cure that is itself a disease”, one cause of the widespread addiction (see Opium Addiction below). Finally, people use prayers written by holy men as cures: the prayers are put in pouches and hung around the neck of the patient, or placed directly on the “sick area”.

No vaccinations have been administered in the districts for several years. When the border with Tajikistan had been open, doctors used to cross into Sheghnan and vaccinate adults and children against diseases such as measles. In the previous year measles had killed many people in the Shewa area of Sheghnan as well as in Wakhan.

5 SHELTER AND CLOTHING

5.1 Housing

We did not come across anyone homeless (in such a hostile environment being homeless means sure death) but some families had no homes of their own and lived with other families. We understood that overcrowding is a problem in some places.

Families generally have summer and winter homes. Summer homes (*ailoq*) are temporary structures made of sticks, brush and grasses, or are tents, and are situated in the summer pastures. Winter homes are permanent and are designed to protect families from the cold, snow, and wind. They are carved out of stone, or more commonly made of mud and stone.

The standard house has just one large multi-purpose room. You enter the house through a short door (about a metre high) and pass through a small stable room into a tiny dark hall. From there you go through another short door into the main room of the house, which is thus protected from the weather. It is dark inside; the only light enters through a square hole in the ceiling which allows smoke to escape. This hole in the ceiling is framed by an elaborate series of wooden squares (which have religious significance) and is closed off by a wooden cover, opened in the summer by a rope. Smoke from the fire used for cooking and heating fills the room. It is stuffy. It is even more smelly in the evening when sesame-oil sticks are burned for lighting.

The walls and ceiling are black. The floor is earth. On three sides of the room are knee-high platforms. Each platform (*dokaan*, literally a shop) is a living quarter for a sub-group of the household (perhaps a son and his wife, or older single sisters) and serves as sitting room, bedroom and play room. There is a worn rug on each platform, some mattresses, quilts, and a thick cloth bundle containing clothing. The only other belongings you can see are a few cooking utensils on the fourth side of the room, where there is a slightly higher platform, containing the bread oven (*tandoor*), the cooking stove, which is also the room heater, and a couple of shelves and space for utensils and food.

Outside the house is a large bin for storing grain. Unlike the living quarters it is well ventilated.

The few, wealthier houses follow the same design but are larger, have more furnishings and are sometimes painted. Some homes have separate cooking areas which help keep the main room clear of smoke.

Homes in the Pamir are circular tents made of felt rugs, called *qotan*. The winds in the Pamir prevent the snow from building up on the tents and collapsing them. The tents are warm. It generally rains in July and August but the wind dries the tents quite quickly.

5.2 Clothing

People in Sheghnan on average have two or three sets of clothes each, which they will use throughout the year. People in poorer areas, and in Wakhan particularly, have fewer clothes. Most clothing we saw was threadbare or heavily patched (even the turbans and hats in Wakhan were full of holes). Many children wore tattered and soiled clothes and few children in Wakhan wore shoes. Many men and women in the fields in Wakhan were also barefoot; some men wore inexpensive rubber boots without socks. As the weather grew colder, we thought that the clothing people were wearing looked inadequate, but they did not seem to notice the cold. Men in Sheghnan wear soft leather boots in the winter.

The clothes of the Sheghnis seemed cleaner than those in the other two districts. People in Wakhan rarely washed their clothes, explaining that washing reduces the life span (washing, as elsewhere in Afghanistan, involves soaking and then beating the clothes with a thick wooden bat). People do wear cleaner, newer (but inexpensive) clothes on special occasions such as weddings and funeral ceremonies.

Women knit sweaters, gloves, socks, hats and scarves, and sew clothing by hand using imported and local cloth (they also embroider traditional designs). Households generally obtain second hand any clothes they do not produce themselves. We saw occasional coats and sweaters in Ishkashim and Wakhan, and some trousers in Sheghnan. The Pamiree men wore special trousers with the ends pushed into their boots and women wore dresses and boots.

6 FUEL AND ENERGY

6.1 Primary Sources of Fuel and Energy

Where possible, farmers grow trees for fuel and timber, mostly hardy, fast-growing varieties of poplar and willow. We saw non-fruit nurseries in the lower parts of Wakhan, in parts of Ishkashim where water was available, and in Sheghnan. The plots were often surrounded by thorn trees to protect the plots from animals (thorn-trees are also used for fuel, particularly in higher parts of Wakhan). The few trees growing wild, brush, and peat are used for fuel where available.

The other main source of fuel is animal dung, which is collected by women and children, shaped into flat cakes, and dried in the sun. Using animal dung for fuel deprives agricultural land of vital manure.

6.1.a Electricity

Power lines had been installed across the Amu River from Tajikistan to Behshar, Sheghnan's district centre, and were extended during the previous regime. Electricity from Tajikistan was provided free-of-charge to all government offices and installations and some 60 houses. After the collapse of the former Soviet Union and the advent of Mujahedin rule, Tajikistan asked for payment for the electricity. The Afghans could not pay and the electricity was cut off.

As the health clinic in Wakhan was not functioning, the authorities had allowed its generator, which was working, to be wired up to 60 homes, each with one light bulb. The generator was turned on for a few hours after dusk each day.

Some houses also used small water-driven generators to supply electricity. They bought the generators from Tajikistan or used generators stripped from scrapped military vehicles. Local mechanics supplied the equipment and set up these ingenious systems (there were two such mechanics in Ishkashim and one in Dehmurghan village in Sheghnan). There is enough water in all three districts to power flour mills and, in Sheghnan, mulberry mills, and should therefore be scope for more hydro-electric schemes.

7 OPIUM ADDICTION

Opium addiction is widespread and directly displaces vital expenditure on food in all three districts. We estimated (conservatively) that each year one addict in an average ten-to-twelve-member household spends on opium at least the equivalent of what it would cost to provide wheat for the whole household for three to four months. There is at least one addict in half the households in Wakhan, and in two-fifths of households in Ishkashim and Sheghnan. A little opium is grown in Ishkashim, but none in Sheghnan and Wakhan. Opium is brought into the districts by opium merchants from other parts of the province. At the time of our visit there was little or no treatment available for addiction.

7.1 Patterns of Consumption

People usually smoke opium but also eat it in small tablet form. Consumption ranges from one *toola* per day (18.5 g) to one *toola* every three or four days.

The amount of opium which an individual consumes depends on the degree of their addiction, their smoking habits, health, age, stamina, willpower, possibly their income, their credibility with neighbours and money-lenders (or opium sellers – usually they are one and the same), family atmosphere, and, finally, the "generosity" and "marketing skills" of the opium sellers. The opium sellers undoubtedly play an important part in maintaining opium addiction in the area.

Using opium takes about three hours per day – the lamp has to burn for at least 20 minutes to "roast" opium to smoking point. People generally smoke opium in "prime farming time" before noon, and then in the early afternoon, and before

going to bed (with possibly one more late-night session). Smoking opium is a break, like a tea or coffee break, and a form of pastime. In the eyes of some, it also seemed to be a way of maintaining status.

Opium is also used generally as a pain reliever, “the cure that is itself a disease”. We were told that some parents feed opium to young infants when they are in pain, or when they are distressed by hunger (some parents apparently feed opium mixtures to young children to keep them quiet while they work on their land).

From discussions with a wide range of people in the three districts we estimated that there was at least one addict in half the households of Wakhan, and one in about two-fifths of households in Ishkashim and Sheghnan. Both doctors in Ishkashim and Sheghnan thought the addiction rates were higher than those figures; the doctor in Ishkashim (who has been there for eleven years) said that wives and children were often addicted, and saw opium as a root cause of the poverty engulfing the districts.

7.2 Causes of Addiction

People quoted many causes of addiction, including:

- lack of access to medicines (opium is used a pain reliever and cure for many illnesses from an early age);
- escape from the worries and pains of normal life;
- help in passing the long, housebound winters;
- a way to cope with a bad marriage [women];
- pressure from other addicted family member(s) who encourage the others to become addicts so that they will no longer protest to spending money on opium;
- pressure from friends and neighbours etc.

These factors must play a part in addiction but when we asked why the majority did not become addicts even though they are subject to the same pressures, we were generally told “they are the fortunate”, “the lucky”, “the blessed, the ones who have a place in paradise.” We did not feel we fully understood why so many people in the districts become addicted to opium.

7.3 Sources and Supply

Opium was not cultivated in Sheghnan and Wakhan. We saw a little cultivation in some villages of Ishkashim, but it appeared to be only for private use. Opium is imported into the three districts from other parts of the province and is supplied by opium merchants.

Many, if not most, shops in Ishkashim and Sheghnan offer opium for sale to both local customers and to customers “across the river”.

7.4 The International Context

A large amount of opium is transported from the north-east corner of Afghanistan into the CIS states via Tajikistan, en route to the lucrative heroin markets of Europe and elsewhere. We heard estimates of one metric tonne of opium being smuggled across the Amu Darya from Sheghnan into Tajikistan every day during the summer. In one village in Sheghnan we came across an opium merchant who wanted to smuggle 630 kg of opium across in one night.

7.5 The Impact of Addiction

Opium consumption is expensive and competes directly with expenditure on food. During our visit one *toola* of opium (18.5 g) cost between 6,500 and 8,000 Afs (prices were highest in Wakhan where addiction is also highest). Assuming a consumption for a light smoker of eight *toolas* per month (148 g) and the lower price of 6,500 Afs per *toola*, a month's consumption costs about 52,000 Afs, and a year's consumption about 624,000 Afs. This yearly expenditure could purchase about 485 kg of wheat in Wakhan⁸ – three to four months wheat consumption for a ten to twelve member household.

These figures are based on lower consumption rates and lowest prices. It is hardly surprising that people often referred to the cost of opium as “annihilating”. Not only is the opium itself expensive, but there are other costs which have not been included in this calculation (eg fuel oil burned to roast opium, the “financing” costs, lost productive time etc).

Merchants in Wakhan make very high profits from bartering opium. They were giving Wakhis one *toola* of opium (18.5 g) for around 25 kg of wheat at harvest time, yet in cash terms one *toola* cost around 8,000 Afs and 25 kg of wheat around 31,500 Afs in the area. Wakhis further lose out from these transactions because they sell their wheat at its lowest price at harvest time, and pay much higher prices to the merchants when they buy wheat back from them at other times.

There are other effects of the opium trade. Sheghnis complained to us that their local shops and traders had been raising the prices of their goods to take advantage of the numbers of opium merchants who are attracted to the area because of drug profits.

7.6 Treatment

About six years ago Sayed Mansoor Naderi, leader of the Ismailis in Afghanistan, opened clinics for treating addicts in Ishkashim and Sheghnan and supplied them with staff and medicines. People spoke of the initiative with great admiration, usually followed by a sigh. The clinics stopped when the Mujahedin came to power four years ago. UNDCP had reactivated these clinics in 1994, and some addicts were treated, but after six months the programme stopped again. The clinics have been operating sporadically since then. Tajik refugee families were staying in the clinic in Sheghnan when we visited.

One thing was clear: most people we spoke to were eager to overcome and to eliminate opium addiction in the area, and would support initiatives to do so.

A Hoax

We were told that in the previous year a doctor had come to Wakhan and had treated some local addicts through administering injections. The doctor had been paid one lak (100,000) Afs in sheep or goats for his services and apparently people were glad to pay. We met one of the doctor's patients, Rajab Ali, an articulate government clerk from the sub-village of Wa-zid, who said he received 21 injections in three days and paid a sheep as fee. In Baba Tangee village we talked to Mohammad Nazeer who said he was "cured" after being an addict for 25 years, through 20 injections and just one sheep as fee. The doctor was Sultan Murad from the village of Waleej in Ishkashim.

When we were in his area we tried to visit the doctor, but could never get to see him (in spite of being told he was there). On one visit, the doctor's mother-in-law told us that the doctor was inside, and served us tea and bread. After entering the house and returning for the third time, she said that she did not know where the doctor was. We later learned that Sultan Murad was not a medical doctor, and had apparently been sent to study veterinary medicine in Tashkent, Uzbekistan, but had returned after only two years.

8 EDUCATION AND LITERACY

Education had been a relatively developed government service in Afghanistan, and Badakhshan was said to have had one of the highest literacy rates in the country. As in other provinces, the education system in Badakhshan has drastically deteriorated since the Mujahedin came to power: school buildings are falling down, equipment and textbooks have all but disappeared, teachers are poorly and rarely paid, and standards have dropped sharply. The three districts have lost most of their access to higher education in centres like Kabul, Mazar and Jalalabad. In spite of these setbacks and the poor facilities, many people remain enthusiastic about and eager for education.

8.1.a Education Facilities and School Attendance

The schools in the districts had no desks and benches (the girls' high school in Behshar, Sheghnan's district centre, did have some). Students sit on the floor, which is often damp. There are very few textbooks. Teachers dictate the lessons and the students take verbatim notes in notebooks which their families have to supply. The blackboards are small and in poor condition. The classrooms usually lack doors and windows and are poorly lit. The roofs leak when it rains. Chalk is made from local clay (UNICEF had donated French-made chalks which were being sold in the market in Ishkashim. Notebooks and compact biscuits which UNICEF had donated were also being sold in the markets of Baharak and Faisabad).

Teachers' and other staff salaries were paid very intermittently – many had not been paid for over a year. Where there is only one school for boys and girls, school hours are staggered so that girls attend school for one part of the day, and boys the other part.

Ishkashim

Ishkashim has three high schools, two secondary schools and 24 primary schools⁹. The total school enrolment in Ishkashim was around 2,000, and the number of teachers 150, including about 20 women.

School attendance is fair. What was striking in Wakhan was that even the youngest pupils walked for more than three hours from some villages to get to school in the next village. In the village of Rorung the children were actually up and on their way at 4:30 a.m. in order to reach school in Krot village before 8:00 a.m. They then make the long trek back at midday.

Sheghnan

We would guess that the district of Sheghnan might have the highest rural literacy rate not only in Badakhshan but in Afghanistan. In their thirst for learning, first-grade children in this district also sometimes walk for several hours to get to school.

Sheghnan has eight high schools, four secondary and seven primary schools¹⁰, with a total of 5,274 pupils (2,273 of them girls) and some 400 teachers including 75 women. The high school in Sheghnan district centre once had a science laboratory and a library. Both have disappeared.

Sheghnan used to be a centre for education, sending many teachers to other parts of Badakhshan and elsewhere. The district had a High School before the neighbouring districts of Darwaz and Ishkashim had any. We were told that students from both of these neighbouring districts used to come to Sheghnan for their high school education. Sheghnis deeply regret the breakdown of their educational system and would like to establish a teacher training college to help reinvigorate it. The nearest teacher training college is in Faisabad, but Sheghni women cannot attend because there are no dormitory facilities (nor can most families afford the costs). The distance and lack of a road also make it difficult for women to train in Faisabad. In spite of the obstacles, people seemed eager to pursue education.

Wakhan

Of the three districts, Wakhan has proportionately the lowest number of teachers and pupils. The district has one high school with 236 pupils and 14 teachers (none of them women), two primary schools and nine secondary schools. The total school enrolment for Wakhan was around 1,300, including 213 female pupils. There were some 70 teachers, a few of them are from Sheghnan, the rest mostly Wakhi. The Pamir has no schools or teachers. During President Daud's era (1973–78) construction started on some school buildings in the Pamir but stopped when the government changed.

Few children were attending school. In the Baba Tangee secondary school (up to ninth grade) grades one and two were on recess because of the measles epidemic affecting children. The 31 pupils of the remaining seven grades were gathered in one classroom. The dirt floor of the classroom was a few feet lower than the ground outside, and was damp. The students were sitting on a protruding stair-like fixture around three sides of the classroom. The other classrooms were

empty and had no seating at all. None of the classrooms had doors or windows, and all were poorly lit.

Access to Higher Education

Parents no longer send their daughters from the districts to university in Kabul or Mazar-e-Sharif because there are now no dormitories for them. This year's Kabul University entrance exam for the high school graduates of both Ishkashim and Sheghnan was administered in Ishkashim and potential male students from Sheghnan missed out: by the time boys reached Ishkashim from Sheghnan, the examination team had left.

8.1.b Educational Curriculum and Standards

The standard national curriculum is taught in the schools, but materials take a long time to reach the area (if they arrive at all). Dari (Farsi) is the teaching medium. Schools are the only places where girls can practice Dari. Families speak the local language in their homes, and girls rarely get out of the home. Girls and women thus tend to speak "purer" forms of the local language than boys and men, but few adult women speak fluent Dari. Speaking local languages would thus be an important element in any attempt to work with women to improve conditions.

Educational standards were low: an eighth-grade graduate in Wakhan had not heard of Kabul let alone knew that it was the capital of the country. The headteacher of Ishkashim High School told us that some tenth-grade students are not even functionally literate.

Once people leave school there is very little for them to read to maintain their literacy and there are now few opportunities for them to use what they have learned. For the community, this means very little payback for the heavy investment of time and money in education. For the individual this of course means frustration. It is thus all the more surprising that people in the area (particularly in Sheghnan) continue to have such a thirst for learning.

9 WOMEN'S LIVES

The information in this section is based on the findings of the woman member of the team who visited most villages in Sheghnan district, and briefly visited Ishkashim district.

9.1 Women and Marriage

A man has to pay a large dowry to a bride's family. Women are therefore seen as economically valuable and girls do not appear to suffer the discrimination which is common when the bride's family has to pay a dowry (discrimination such as feeding girls less food than boys).

It is not uncommon for men to have more than one wife. Sometimes a first wife will encourage her husband to take another wife and will help him find one. She might be childless or be finding it difficult to cope with the housework if they

have a lot of children. Attitudes to this practice appear to vary from village to village.

A girl's parents decide when and whom she marries. There did not seem to be an average age at which women get married. In Sar-Cheshma village, Sheghnan, there were girls who were over 20 and unmarried, as well as 14-year-olds who were married. In Arakht, which is more remote, girls as young as 12 years old get married.

The age of the groom is more of a problem. It appeared that marrying young girls to very old men is quite common, for example in Dehmurghan village, Sheghnan, there was a young woman of 18 who was married to a 50-year-old. These marriages are usually forced. Men may marry late because they cannot accumulate the bride-price until they are quite old. In this area however the bride-price is paid communally and there were bridegrooms as young as 15 and 18, so there must be other incentives or causes.

In one village, people said that marrying young girls to older men was a way for landless families to acquire land. Acquiring land through marriage is possible provided that a woman does not remarry if she becomes widowed. A widowed woman who remarries loses control of her children by her former marriage and forfeits any inheritance through the children.

Opium addiction appears to be another reason for marriages between young girls and older men. We were told that girls whose fathers are addicts are virtually sold to the highest bidder. The community disapproves of this kind of behaviour.

Some women are put under strong emotional pressure to marry: parents may berate a daughter for being ungrateful or shameful in disobeying them if she does not want to marry. Other women get married because it is no longer possible to have a career. Unhappy marriages were given as one reason why women get addicted to opium.

Parents generally think that they are helping their daughters by improving their standard of living through marriage. Parents do have an interest in marrying their daughters to wealthy men because parents become the responsibility of their children and their in-laws when they get older. In Sheghnan there is now a problem with the Mujahedin marrying girls by force.

9.2 Women's Traditional Activities

Daily

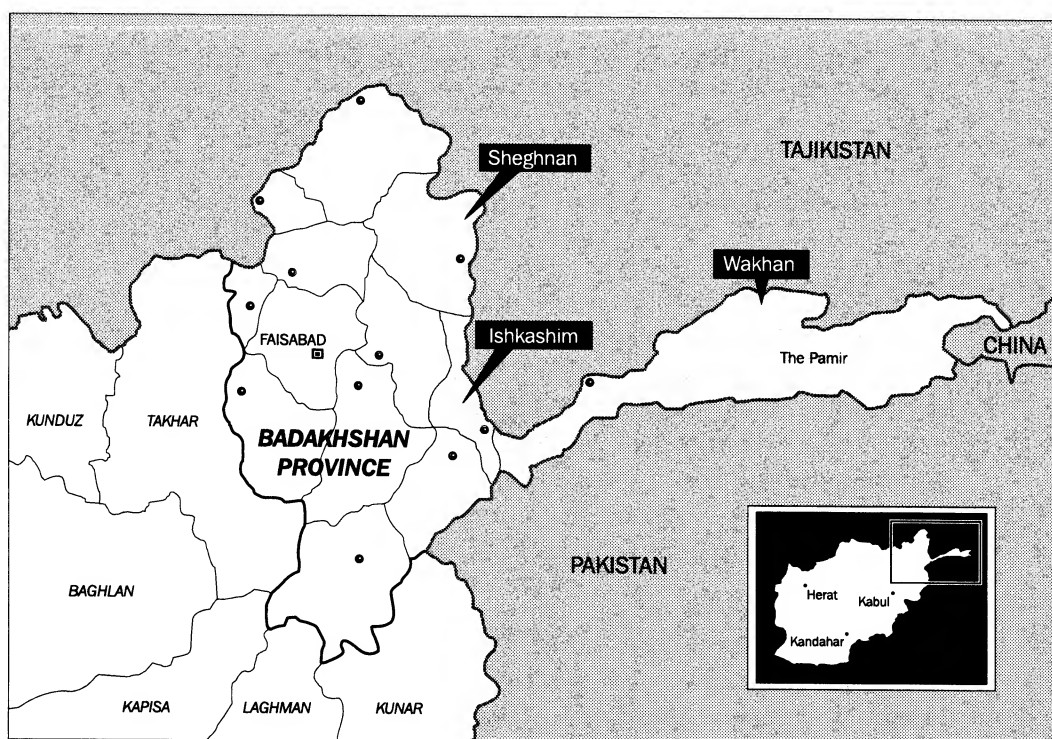
Women rise at 4 a.m. and go to sleep when their duties are done. In summer, they first milk any animals which are not at the summer pasture. They light the fire which they use for cooking and prepare the traditional *shor-chai*, salty tea, and bake bread.

They spend the rest of the day performing seasonal farming activities, doing housework, looking after children, and preparing the other meals. Girls and women fetch water from springs in the summer and boys fetch water in the winter because of the snow and ice.

SUMMARY REPORT

1 BACKGROUND

From 1 June to 8 August 1995 a team of Afghanaid staff carried out a Rapid Rural Appraisal of Ishkashim, Sheghnan and Wakhan districts in Badakhshan province in the north east of Afghanistan. The purpose of the appraisal was to select a site for our community development pilot project, and to help us design a general programme of assistance for the districts. The team visited most villages and met a very wide range of people to collect the information in this report. A woman joined the team for the survey of Sheghnan, enabling them to talk directly to women there.



Ishkashim, Sheghnan and Wakhan are three of Badakhshan's most remote, under-served and poor districts. They are extremely inaccessible, sparsely populated and mountainous. The winters are prolonged and severely cold and summers are mild. People in the area are predominantly Dari-speaking Tajiks, although each district has its own spoken language. Most people follow the Ismaili sect of Islam. The Kirghizi inhabitants of the Pamir, in the east of Wakhan district, are an exception; they follow Sunni Islam.

2 FINDINGS

Communities in all three districts face severe problems and have urgent needs. The most basic and chronic problem is the severe food deficit, which cannot be solved in Sheghnan and Wakhan in the near future. Other major problems

Summer Activities

Agriculture: In summer women carry out the time-consuming task of weeding the agricultural fields (*khesawe*). This is a very important function and a good example of the agricultural division of labour by gender.

Women do the weeding, which needs nimble fingers and are patience. Even in exceptional cases, men and women will not reverse roles. Women will not do the ploughing, and similarly men will not do the weeding. In poorer households or woman-headed households women also have to help harvest.

Women take wheat to the mill for grinding to flour. They do not have all the wheat ground at once, apparently to regulate the amount of bread the family eats and ensure that they do not starve. The miller is given 1/9th of the wheat.

Work in the orchards: Mulberry picking (*tut-chini*) is a very important task because dried mulberries are the staple food in winter. Like weeding, it takes patience and nimble fingers to pick the large numbers of tiny fruit off the ground under the trees. On very windy days, women place large baskets in the irrigation canals to collect the *tut* which has blown into the water. They feed this fruit to their animals in winter. Nothing is wasted.

To prepare for drying mulberries, men and women bring earth to the roof of their house and mix it with water to make a mud plaster. They spread the mud over the entire roof, smooth it, and leave it to dry. Women prefer to do this work themselves because they are more skilled at smoothing the mud with large flat stones. The task is called *lai-kari*, which begins in spring and is communal: a number of women get together and complete one roof in half a day. When the roof is dry, the women then spread mulberries and other fruit over it and leave them to dry in the sun.

If a family owns a large number of *tut* trees and only has a few women in the household, they will invite other women to come and help. Their payment is a bowl of *tut* to take away and as much as they can eat while they are working. If a family has a small number of *tut* trees and spare capacity, then the women will work in other people's gardens.

There are no orchards and therefore no mulberry trees in Weir, Pastiw, Ghar-Jaween and Darmorakht villages in Sheghnan. Some of those villagers own orchards elsewhere and send women to gather the mulberries when they are ripe.

Pasturing livestock: Taking village livestock up to the *ailoq* (summer pasture) is another important task women perform. The number of women involved depends on the size of the herds, and a few men also take part. For example, around 70 women from Shiduj village, Sheghnan, had gone up to the *ailoq* this year. The women know something about dealing with broken limbs and treating the animals' ailments. Some livestock are kept in or near the village.

The men's role involves travelling back and forth to take food up for the women and to graze the animals, fighting off wolves or other dangerous animals. The women milk the animals and produce cheese, yogurt, butter and *qurut* (dried balls of yogurt). The men take these products back to the village while the women stay in the *ailoq*. Each village has its own area allocated as *ailoq*, which

are often far off. Living conditions are harsh and the women say they are bored when they are not working.

Women do not sell dairy products in the village bazaar because it is not customary. The only dairy product which they do sell is the *qurut*, which is in great demand when the animals return from the *ailoq*.

Handicrafts: Women make felt rugs in the summer. They first beat the wool with a bow-like instrument (*kamanchak*) to make the wool soft and fluffy. This is called *sust kardan*. They dye the wool for the patterned part of the rug and lay it out when it is dry. Women use white wool to fill the gaps until the rug is complete. They place more white wool over the whole rug and add water and soap to stiffen the rug. If they don't have soap they use powdered broad beans. Several women roll the rug continuously for about 4 hours. It takes the wool of about 40 sheep to make one 3mx5m rug.

Throughout the year, women and girls use tiny beads to make chokers and elaborate ornaments for their plaits. The designs are simple and geometric.

Winter Activities

Handicrafts: In winter, unmarried girls and young women sew items which they will take to their future husband's house. They use three different types of embroidery: *suzani* – naturalistic flower designs; graph – cross stitch; and *pakhteduzi* – geometric designs sewn around borders of clothes in one colour.

The first two types of embroidery decorate pillow cases, bed spreads, clothes, covers, tablecloths and wall hangings. A small number of women continue to make embroidered goods after marriage. They make clothes with graph embroidery, either to order for other people in their village or sometimes for sale them in Faisabad or Pakistan (their husbands take the goods to market). However, the demand for such clothes is low.

Knitting is another winter activity. Older men usually spin the wool and women knit, regardless of age and marital status. Jumpers, socks, scarves, gloves, and hats are the main articles knitted. The colours are bright and the traditional patterns are complex and geometric.

A special cloth is made in Sheghnan called *taan* (see Clothing above), which is used to make *chakman* (thick long-sleeved coats for men) and trousers and waistcoats. Women beat the wool, as for making felt rugs, and spin the wool into thread using a spinning wheel. Men then weave the thread into *taan* on special looms. It takes 20 days to prepare a *chakman* and the finished product can be sold for between 1 to 2 lak Afs. *Chakman* are also made in the summer.

9.3 Income and Income Generating Activities

Any income generated by women is considered to be family income and is controlled either by the head of the family (most likely a man) or by the person in the family with the strongest personality (equally likely to be a man or a woman).

In woman-headed households, where the husband is dead or working abroad (see below), the woman has to control the household income. This appears to be

a growing trend all over Afghanistan, owing to the fact that more and more men are having to leave home in order to find work.

Some women in most villages in Sheghnan keep chickens. Boys sell surplus eggs at 150-200 Afs each, generally to relatives or others who know where to buy them.

9.3.a *Employment*

There were no women working in the local district administration in Sheghnan, even as secretaries. There were no women doctors in Sheghnan. We were told that there were some nurses but we did not see them so cannot describe their qualifications and duties. Apart from traditional birth attendants there are no other female health workers in Sheghnan. Teaching is the only formal profession available for women at present. With the present economically and politically unstable situation more and more young women see marriage as the only way to make a living.

Teaching

Because there is no teacher training college in the area, the majority of teachers have gained their expertise in teaching on the job. The Head of Education claimed that efforts would be made to increase the number of female teachers in Sheghnan. The teachers themselves believe that this is simply rhetoric even though there is an urgent need for more female teachers.

Many women who teach, and who will be looking after their families, also have to pick and dry mulberries or do other kinds of work in order to survive. Some said that teaching was too great a burden and that they would prefer to give it up, but that they were forced to continue through subtle forms of pressure, such as education officials using family ties to remind the women of their obligations to their various relatives.

9.4 Problems, Opportunities and Prospects for Women

9.4.a *Women and the Islamic Government*

It appears that women and girls in and around the centre of Sheghnan decided to wear the *chadari* (full-length veil which covers the entire face) as a result of verbal harassment from the local Mujahedin. We were told there has been an increase in Mujahedin physically harassing young women in this area, though the number of incidents still appears low.

Women in the surrounding areas do not wear *chadari*. It seems that the government would have liked to put pressure on women in the area to observe full *hejab* but most of the people were simply too poor to afford a *chadari*. A compromise has been reached whereby women have to cover their face as soon as they come face-to-face with a strange man. It is clear that this is not part of the culture; not all women observe the rule.

Women are allowed to travel only to those places which their role in agriculture or the social life of the village requires: to the *ailoq*, the mulberry orchards, other

people's houses for social occasions such as weddings, to school. This restriction is traditional and not a result of Mujahedin rule.

9.4.b *Woman-headed Households*

The number of woman-headed households is on the increase because of out-migration to find work and because of deaths during the fighting, which still continues. In Sar-Cheshma, Sheghnan, for instance, there were five or six woman-headed households out of a total of 48 households while in Dehmurghan it was estimated that 50-60% of the households were woman-headed. Generally, some ten percent of households in the districts are probably headed by women.

Men who have migrated continue to send money to their wives if possible. People in Sheghnan said that migrating to find work did not bring lasting improvements to the welfare of the family and that any benefits were short-lived and sporadic.

The division of labour by gender creates problems for women in woman-headed households who have, for instance, inherited land from fathers or husbands. They cannot plough it themselves and have to call on male relatives to help, or hire labourer(s) to work the land. As a result, they may have to part with at least half the harvest. Scarcity of land deters a woman from selling her land in such a situation.

If a woman wishes to remarry, the relatives of her former husband keep her children. The reasons are economic. Boys provide labour and girls bring a bride-price when they marry. A woman who remarries becomes the responsibility of another man, is not deemed to need the economic benefit derived from her children, and thus loses them. Many mothers and children suffer emotionally as a result of this custom and some women who lose husbands choose to stay unmarried in order to keep their children.

The general poverty of the entire area means that few women can find employment doing domestic chores for other families.

9.4.c *Women and Education*

Fewer girls attend secondary school than primary school. Girls are forced to drop out of school at secondary level for various reasons, most of them economic. Girls are of economic value to their family through marriage. Some parents therefore pull girls out of school at an early age to get them married, especially if the suitor is wealthy. If a girl's parents do not force her to drop out of school, her husband's family often will. This depends entirely on the husband's level of education: an uneducated man generally prefers his wife to be as uneducated as he is.

Another reason for fewer girls attending secondary school is that some villages have no schools and parents are unwilling to take the risk of allowing girls who have reached puberty to travel from village to village.

Some fathers refuse to send their daughters to school altogether. Many men completed their education just as the war began and were drafted into the army. They have had no permanent or gainful employment and do not see that you need any qualifications to farm the land. Others do not see the point of investing

in education for their daughters because they will not reap the benefits when their daughters marry. They cite the fact that a husband's family may well in any case prevent a young wife from continuing her education. Increasing unemployment is also deterring parents from sending children of both sexes to school. No matter what the reason, a girl's schooling usually does end with marriage. Many women resent this.

Adult Literacy

Some women who had never been to school and were widowed knew that literacy would give them a slightly improved chance of finding work but late starters are not allowed to attend school.

A number of women in villages in Sheghnan only spoke the Sheghni dialect and had a very basic knowledge of Dari. Because Sheghni is an oral language in this area, these women can neither read nor write. Some women felt that there was no need to know Dari.

9.4.d Women and Opium Addiction

Opinions about the extent of opium addiction among women was divided, some saying it was high and others that it was low. We were told that women used opium as a substitute for medicines, particularly pain killers. Some said women used opium when they were depressed, or to blunt the anguish of a forced marriage, or when bored in the summer pastures.

9.4.e Helping Women Make Improvements

There are significant ways in which women in the area might be assisted, and also in which they might be excluded from attempts to improve the quality of life:

Adult literacy is important for women because it will improve their chances of being able to take part in community matters (lack of education is a barrier). Literacy in Sheghnan would enable more women to use the lingua franca – Dari. It would give women more confidence to voice their opinions. Education would have to be organised on an informal, voluntary basis because of women's heavy workload and because the formal education system would be unlikely to provide an adult literacy programme.

Education about health, hygiene, and nutrition would raise awareness of the underlying causes of illnesses and disease. Being preventive rather than curative, it would be cost effective. Good health is essential to enable people to take part in and contribute to all aspects of community life, to get the full benefit of services such as education, and for improving productivity. In a remote area such as Sheghnan, imported concepts of health care, based on treating individuals in a hospital or clinic using medicines, are not sustainable in the long term. The present courses on hygiene in schools are theoretical; they do not seem to have much impact and do not reach all women in the community.

Animal husbandry programmes in Sheghnan and the other districts should take great care to involve women in appropriate ways. Since women in Sheghnan deal closely with large numbers of livestock in the summer months, any activities or training dealing with the vaccination or monitoring of animals

should be directed at them as well as at men. Training men only may result in some of the traditional roles and responsibilities of women in caring for livestock being usurped by men.

Income-generating projects should try to target women, especially widows and wives of migrant workers, as these women are vulnerable and fall through the safety net of traditional social welfare systems. Afghanistan's bee-keeping project which started in Sheghnan in late 1995 should not only try to train women in bee-keeping but also in marketing produce, as women are not always involved in this aspect of income generation in Sheghnan.

Marketing more goods produced by women should be possible with improvements in transport, assuming there is some unmet demand. However, most of these goods rely on wool and the number of animals is restricted by the amount of fodder available. The hills where fodder is collected are common property, with fixed rules on their use established by the community. Encouraging any activity which would cause more animals to be kept will increase the pressure on scarce land and could lead to conflict as people try to collect more fodder.

Improving agricultural yields will benefit the whole population, especially women and children. However, with the population growing and land being scarce, any measures to improve agricultural yields will have to be sustainable and avoid upsetting the balance in this fragile, marginal area.

10 SERVICES AND SUPPORT

10.1 Communications and Transport Systems

10.1.a Roads and Transportation

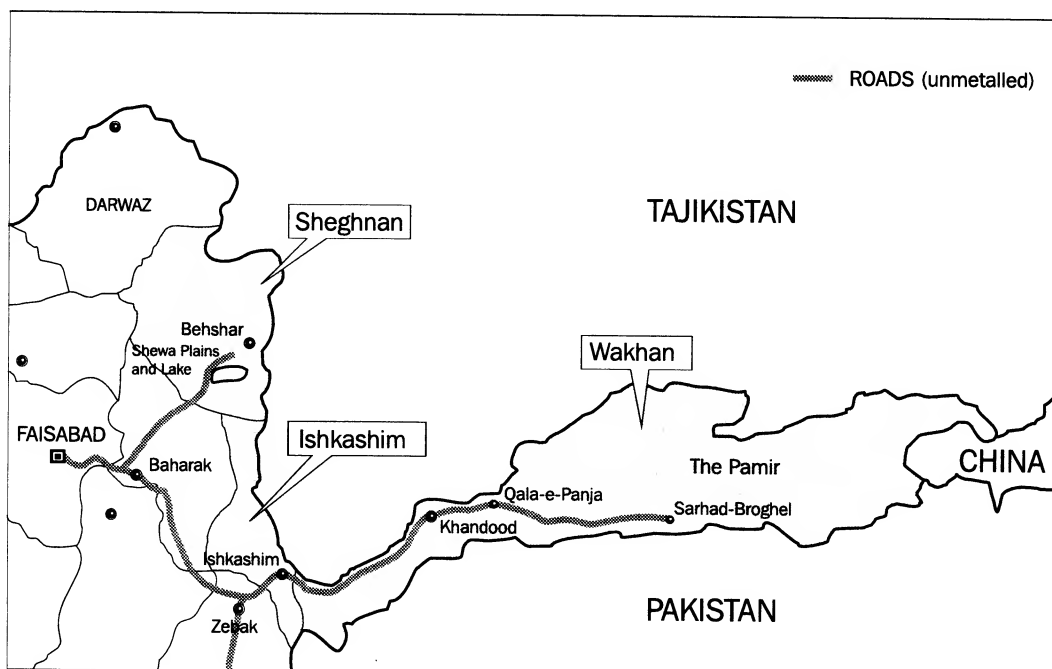
People in Sheghnan and Wakhan districts considered the lack of roads and access to be a root cause of many of their difficulties. The effects of road conditions on prices of basic goods in the three districts have already been described (see Purchasing Food above). These are the only roads in the three districts:

From Baharak to Ishkashim

There is a dirt road from Baharak to Ishkashim which then proceeds to Wakhan. It is in a poor state and crosses many creeks and rivers. The road is impassable during the spring floods, when the river levels rise in the summer, and when there is heavy snow. The road is at its most usable from mid May to early July, and then from mid August to late November/early December.

About half of Ishkashim's villages are near the road. Other villages have to use footpaths and donkeys for travel in the district or to get to the road. Gharan, for instance, is near the border with Sheghnan, and is about three days walk from the centre of Ishkashim along a difficult footpath which follows the banks of the meandering Amu Darya.

There is a modern WFP storage depot on the banks of the Amu Darya, about six kilometres from the centre of Ishkashim, which can easily be reached by this road.



From Ishkashim to Wakhan

The above road continues from Ishkashim towards Khandood, the district centre of Wakhan. This section of the road is less vulnerable to the weather and is motorable most of the year except when there are heavy snows or downpours. From Khandood the road proceeds for about 30 km to Qala-e-Panja village. Although there is a road from Qala-e-Panja to Sarhad-Broghel, the last village of Wakhan, it has been neglected, is in very bad repair, and is no longer motorable.

After Sarhad-Broghel come the Major and Minor Pamirs which can only be reached with yaks or horses along high, narrow and difficult passes. For four to five months each year these passes are blocked and people travel by walking along the frozen river.

However, for their access to the rest of the province Wakhis are entirely dependent on the condition of the road between Baharak and Ishkashim.

From Faisabad and Ishkashim to Sheghnan

Sheghnan is the most inaccessible of the three districts. There is currently no road to the district centre, Behshar. Since 1992 Afghanistan has been building a road connecting the main Faisabad-Baharak Road to Sheghnan via the Shewa plain. By August 1995 this road had reached Ghar-Jaween village on the edge of Sheghnan district, about 16 km (three hours walk) from Behshar. Encouraged by this, the district authorities have undertaken to complete the road to the district centre and have received 30 million Afs from the Government in Kabul for the purpose.

Bridges will have to be built across three rivers to complete this road link to the district centre, and cannot be constructed in 1995 (Afghanaid has subsequently agreed to help build these bridges in 1996). Goods which can now for the first time be transported by heavy truck to the edge of the district must still be carried within Sheghnan by donkey or horse. This is impossible during the winter. The Shewa-Sheghnan road is only usable from mid June, when the snow melts on the high passes in Shewa, to late October or early November, when the snows begin again.

There is another way to reach Sheghnan, through Ishkashim. A difficult and sometimes very narrow foot trail winds north from the village of Gharan in Ishkashim towards Sheghnan, mostly following the banks of the Amu River. Sheghnis use the track to bring food and other basics to Sheghnan when the Shewa road is closed. It would not be feasible to transport emergency supplies along this route to Sheghnan.

10.1.b Transport Costs

Transport costs reflect the road conditions. During our visit, to transport a kilogram of wheat from Faisabad to Ishkashim cost 71.4 Afs, and to transport it from Ishkashim to Khandood in Wakhan cost 143 Afs. We had no comparative transport cost to Sheghnan because the road link to the district had not been completed. However, the price of wheat in Sheghnan was 81.76% higher than in Ishkashim, and 33.28% higher than in the centre of Wakhan, in spite of the fact that Sheghnan is nearer to Faisabad than Wakhan is. Sheghnis have been paying dearly for having no road link to the rest of the province.

10.1.c Telecommunications

There are no telephone lines connecting any of these districts to elsewhere. However there was one telephone line within Wakhan connecting Khandood, Wakhan's district centre, to Sarhad-Broghel, the last village of Wakhan. It was working when we were there.

10.2 Services and Agencies in the Area

Government services in the area are limited to the educational and medical facilities we have described, and to a few agricultural personnel in Ishkashim and Wakhan districts (who do not seem to carry out any activities). Apart from Afghanaid, other agencies with some presence in the area are the Norwegian Afghanistan Committee and ORA International. UNICEF and WHO occasionally provide supplies, and WFP funds food-for-work projects in the area. To our knowledge, Afghanaid is the first organisation ever to carry out any significant survey of this area.

10.3 Security

Security in the districts is good. Being so remote, the area has not experienced the fighting which has plagued other parts of Afghanistan. There are no skirmishes. The religious and government authorities have control over the areas, including a monopoly over arms.

11 ON SOCIAL CHANGE

11.1 Self-Image and Self-Help

Over centuries communities in the area have developed ways of coping with the extremely harsh conditions. Given their current know-how and technology these communities seemed to us to have made the best use of the scarce resources (from the traditional thorns grown around trees to protect them from animals to the tank dynamos and bicycle wheels used to generate hydro-electricity). Social systems have evolved to ensure that resources are spread across as many sections of the community as possible. These systems came into play when the Shewa-Sheghnan road was being built. Gangs of labourers from different villages took it in turns to work on the road. This spread the benefits of the wages from employment, but also allowed the underfed labourers to rest and to attend to essential tasks on their farms.

11.2 Openness to Change

Many people we talked to spoke of “being behind”. In the mid-seventies around a million Afghans had gone to work in Saudi Arabia, the Gulf States and Iran and had been exposed to new possibilities. The war then exposed many more people from rural Afghanistan to other ways of life. Every day many people in the three districts can make comparisons with their own eyes. Those in villages near to Tajikistan see electric lights, more modern buildings, telephone poles, and paved roads on the other side of the river.

One young man in the village of Sar-Cheshma in Sheghnan was listening very attentively to our conversations with a group of villagers. As we began to explore the subject of being behind and what can be done about it, he suddenly spoke. Pointing to the other side of the Amu River, to Tajikistan, he said, “We can see where others are and what they have and where we are and what we have, how they are living and how we are living. We can see.”

The sense of possibilities which such comparisons provide can be important seeds of social change.

Other people we spoke to referred to the possibilities for change, and seemed concerned with the causes of their problems. Such people may well become the vanguards for change in their communities if there is a catalyst for the process.

A young man in Deh-shar village, Sheghnan, after listening to all that had been said about the problems and needs of the community, rose and said he too would like to say a few things. He began, “Everyone present has enumerated the problems and needs of our village well but no one has mentioned what we can do or should be done to improve conditions. No one has said that we should look at some of our habits and customs.” He paused, then continued, “No one has mentioned that if we could quit our addiction the amount of money we could save would be enough to satisfy many needs or solve many problems. We all pay the oshr [the ten percent tax or religious tribute] but never ask what this community ever gets in return. Just imagine if we had put one sack of wheat aside each year we would not now be in the desperate situation we are in.”

Poverty saps a person's mental and emotional as well as physical strength. Not surprisingly, many people seemed worn down by the grinding poverty and endless problems of their lives. This must be playing a part in the high level of opium addiction in the area. However, we also met significant numbers of people who seemed to have a will to question and to change their lives.

Local authorities were keen to co-operate with us, and are eager to help any programme to improve conditions.

12 CONCLUSION

Communities in all three districts face severe problems and have urgent needs. The most basic and chronic problem is the severe food deficit, which cannot be solved in Sheghnan and Wakhan in the near future. Other major problems include the lack of roads and high transport costs, widespread opium addiction, lack of health facilities, high infant mortality, poor hygiene, an educational system in ruins, and very few employment opportunities. Scores of deaths from measles were terrorising people when we visited Wakhan, rather the usual spectre of hunger or starvation.

The possibilities for expanding existing ways of making a living, or introducing new ones, are severely limited.

12.1 Major Constraints People Face in Meeting their Basic Needs

In all three districts the main obstacles to meeting basic needs are:

- shortage of agricultural land;
- poor soil;
- pests, crop and animal diseases;
- inefficient agricultural practices;
- lack of roads and inaccessibility;
- lack of health facilities and basic health knowledge;
- opium addiction;
- altitude and climate.

Some of these constraints, such as climate and altitude, cannot be tackled directly. But there is scope, for example, to change practices to improve yields and make crops and animals less vulnerable to the climate..

¹ One Chakman costs 160,000 – 200,000 Afs in Sheghnan.

² The coupons provided wheat (56 kg), cooking oil (6 kg), tea (500 g), and sugar (5 kg) per month.

³ The allowance was 8 seers (56 kg) per family per month. Not all government employees received the coupon.

continued...

include the lack of roads and high transport costs, widespread opium addiction, lack of health facilities, high infant mortality, poor hygiene, an educational system in ruins, and very few employment opportunities. Scores of deaths from measles were terrorising people when we visited Wakhan, rather the usual spectre of hunger or starvation.

2.1 Making a Living

The traditional ways to make a living in the districts are agriculture and animal husbandry. Other sources of income are selling fuel-wood and timber, handicrafts, government employment, and employment in Pakistan and elsewhere. Many families use a mix of these sources to try to get by.

However, most families are finding it very difficult to meet their basic needs. Declining crop yields, the loss of government jobs and of associated subsidies, worsening terms of trade, and population increase are just some of the reasons.

There are also strong constraints on all income-earning activities. Families are forced to balance their budgets by going hungry, or eating the seed they should be planting next season, or even resorting to begging. Some have to sell their land, and work it as share-croppers for someone else. Trapped in this vicious cycle, the poor simply get poorer.

2.2 Food and Nutrition

None of the three districts are currently able to produce enough food for their inhabitants. Using average yields, we estimated that Ishkashim has a two-month food deficit, Sheghnan a three-to-four-month deficit, and Wakhan a five-to-six-month deficit. Families are most vulnerable in spring when winter supplies have run out and the current year's crops have not yet ripened. People try to meet the shortfall by buying in food from outside. They mostly pay for it by selling their livestock, which may reduce their number of animals to dangerously low levels.

Purchasing power in the districts is not only very low but is continuing to decline. Transport costs are high because the districts are remote and inaccessible, and imported goods are consequently expensive; prices rise sharply when travel gets more difficult. Transport is thus a vital factor in achieving food security in all three districts.

Families have to spread food thin to provide daily meals, serving the standard dishes such as *gard-aabeh*, a weak mix of grain and water "which just silences the stomach". A woman in Sheghnan explained:

"We try to keep as much of our wheat as possible unmilled because that way when our children demand bread we can tell them we don't have flour."

Malnutrition among children is common, much of it severe. Diets are poor and leave people vulnerable to disease. Dried mulberries are the only food some families eat during the winter, and that often runs out before spring.

2.3 Health and Health Practices

Measles, dysentery, whooping cough, diarrhoea, tuberculosis, intestinal and respiratory disorders are the main illnesses in the area, and appeared common.

...continued

⁴ The prices in the table were recorded at very different times. For the districts they are about three weeks apart. The Faisabad prices were recorded at the end of May 1995. They were checked again in mid August. No noticeable change had occurred.

⁵ Facts and figures quoted were gleaned from women in Sheghnan by our female surveyor and are regarded as broadly representative of conditions in all three districts.

⁶ On 30 May 1995 two members of our team visited the hospital in Faisabad to obtain information and advice before setting off the following day to survey the three districts. They were shown a letter which the hospital had just received from Wakhan, pleading for help with a disease which had killed many people. The disease had become severe in November 1994, seven months earlier. The Health Department told our staff that they could do nothing in response to the letter. They said they had no personnel to send to diagnose the disease, nor the means to respond, and referred to the difficulty of trying to reach such remote areas.

⁷ There were other “doctors” mentioned but it is unlikely they were qualified, and more likely they had had some basic medical/health training.

⁸ Wheat cost 9,000 Afs for 7 kg in Khandood, Wakhan, just before our departure on 24 June, 1995.

⁹ Primary schools can be “elevated” to secondary school status after a bureaucratic procedure is completed. Sometimes two or more primary schools may be incorporated into one secondary school. Some primary schools only teach pupils to third grade and are called “rural schools”. Many so-called primary schools in the districts are in fact rural schools.

¹⁰ In the school classification system grades 1–6 are primary (or elementary), 7–9 secondary and 10–12 high school. Usually secondary schools and high schools also teach primary or secondary grade pupils, often conducting classes in two sessions because of shortage of classrooms.

RECOMMENDATIONS

The urgent priorities that communities expressed were for roads, tackling health problems, food, and the treatment of addiction. The order varied but the same needs were articulated village after village in all three districts. Food received consistently more stress in Sheghnan and Wakhan.

Just as the problems people in these districts face are multi-faceted and complex, so too measures to help communities address those problems must equally be multi-faceted. There is no one simple way to unravel such a tightly woven fabric of poverty. Nor will short-term activities make any lasting improvements to people's lives. Any agency which wishes to help these communities address their problems will need to live with people in the area for some time, take a multi-faceted approach, and carefully examine the long-term impact of their activities.

1 AGRICULTURE AND ANIMAL HUSBANDRY

Agriculture and animal husbandry are the two main and most tangible ways in which people in these districts make a living, and require particular attention. With some outside guidance and support, the communities we visited have the experience and will to make improvements in both sectors.

1.1.a *Increasing Agricultural Production*

Food security can be improved through measures to increase the yields of agriculture and to reduce the vulnerabilities of the sector (see Appendix I for details of these measures).

These measures may well not increase agricultural food production sufficiently to cover needs in Wakhan and Sheghnan. Nevertheless, apart from putting more food into the local system, increasing food production would provide other benefits:

- food prices should drop or price-increases be reduced (through the increased supply of food and a likely reduction in demand);
- less food would need to be procured "at any price", giving greater leverage to local people in relation to itinerant merchants;
- the potential savings families could make through lower food prices and through having to purchase less food might enable them to wait to purchase at more favourable prices, and perhaps to purchase in greater quantity (thus also reducing time and money spent on transporting food);
- non-monetary benefits, such as reducing the current preoccupation with food and the self confidence which would follow.

1.1.b *Improving Animal Husbandry*

Animal husbandry appears to offer greater scope than agriculture for making good the food deficit. The constraints on animal husbandry in these districts are not as insurmountable as they are on agriculture (pasture limitation in Ishkashim

perhaps excepted). Because of the pastures available in Sheghnan and Wakhan, it should be possible to expand animal husbandry there (albeit the difficult problems of overwintering have to be overcome). Pastures are more limited in Ishkashim, but are compensated for by the greater scope to increase agricultural production there. Since animal husbandry is the sole occupation in the Pamir, measures to improve it are essential in that area.

Improved animal husbandry increases the numbers of livestock as well as their products. Livestock can be traded to meet food shortfalls from the agricultural sector, and are thus an important source of support in these communities.

Any measures to improve animal husbandry should take great care to involve women, whose traditional roles in the activity may otherwise easily be usurped.

We therefore advise carrying out a more technical and specialised study of the needs, problems, and practices of animal husbandry, and of appropriate measures to improve it.

2 GENERATING INCOME

As already discussed, the potential for expanding handicrafts is limited both by the availability of raw materials and by the lack of markets. Cottage industries and other income generation possibilities will need to be thoroughly studied before any measures can be planned. Other ways of generating incomes should be explored (Afghanistan has, for instance, successfully introduced beekeeping to other parts of Badakhshan).

Given the number of woman-headed households in the area, it is particularly important that women (especially widows and wives of migrant workers) are targeted for such projects.

3 REDUCING EXPENDITURE

The present possibilities for increasing food production and for generating incomes with which to purchase food are limited. Another way families could purchase more food with their available resources would be to reduce other forms of expenditure. Ready targets for reducing expenditures might be:

- high transport costs (for people and materials);
- the cost of opium addiction;
- improving the adverse terms of trade.

3.1 Constructing Roads

Road construction and repair are needed to improve accessibility and communications. As well as providing income in the short term (during construction) improved roads have important long-term benefits. They save communities money through reducing transport costs, save time away from work through reducing travel time, make the districts more accessible for vital services such as vaccinations, and should help reduce the present reliance on

itinerant merchants especially in Wakhan. All three districts need roads and better access (see Appendix II for details of the work involved).

3.2 Reducing Opium Addiction

Any measures which alleviate addiction would release significant funds for other purposes (see paragraph 5 below).

3.3 Improving Terms of Trade

Given the current factors which result in adverse terms of trade, particularly in Wakhan, it should be possible to improve the bargaining power of households and reduce their dependence on itinerant merchants. Growing more food locally and building roads which provide better access to markets (and lower transport costs) will reduce the need for families to buy food “at any price”. Reducing opium addiction would also weaken the overall bargaining position of the merchants. However, these are current conditions. Other factors may emerge in the future which may cause even more adverse terms of trade.

3.4 Total Savings

The total potential savings in expenditure so far suggested are:

- lower food prices owing to increased agricultural output, reduced demand for food from outside, and lower transportation costs (through road construction);
- families purchasing less food owing to increased (agricultural) food production;
- reduced transportation costs following road construction and improvement;
- the possible reduction or alleviation of the cost of opium addiction;
- possibly improved terms of trade.

These savings seem to us sustainable and feasible. For instance, drivers and villagers who live along existing roads are already maintaining them and would continue to do so, compelled by their dire need for the benefits the roads bring if for no other reason.

4 IMPROVING HEALTH

Tackling disease and the poor infant and maternity care in these districts is as urgent a priority as the shortage of food; together they cause many deaths. A variety of measures are needed.

4.1 Carrying Out Vaccination Programmes

Vaccinations are the most urgently needed medical activity. Provincial and district health authorities and health-oriented NGOs will need to co-operate to achieve such a programme. The districts’ remoteness and inaccessibility, particularly of the Pamir, are cited as reasons why vaccination programmes have

not been carried out. Afghanaid's sub-offices in the districts could be used by agencies setting up such programmes.

4.2 Getting Clinics Working

Health clinics need to be set up or reactivated in each district. They have a vital life-saving role which should be brought to the attention of health-oriented NGOs. Where there are clinics, they are no more than shells. Infant and maternity care should be high on such clinics' priorities.

4.3 Improving Hygiene

Hygiene is a matter of habit and custom. Women are of course the prime carriers of such customs, and the people on whom to focus to make changes. We would suggest appointing and training local women to act as "social change agents". They could help to design and gradually introduce to households a programme covering subjects such as personal cleanliness and food and water hygiene. Such a programme would need to be evaluated in depth. It could open up new vistas for women in their own communities and thus have more far-reaching effects on how women perceive their roles.

We would recommend that local women who are to be employed as "change agents" should:

- be well paid;
- be literate and trained well in the required approach, their role and the content of their work;
- recognise that language and communication may be a problem (particularly in Wakhan) and appreciate that to be effective they must respect and understand the women they are working with, and blend in with them (this needs stressing because of the dangers inherent in educated women taking a "top down" approach to teaching people "what's good for them");
- ensure their accommodation and other facilities (e.g. transport) do not make them too conspicuous or too different from the community;
- ensure they do not spread themselves too thin;
- be supervised, monitored, and supported.

5 REDUCING OPIUM ADDICTION

5.1 Co-operation and Endorsement

Health personnel in the districts should be involved and their co-operation sought. From our conversations with them, they would be very keen to support any initiative to reduce addiction.

Local authorities should be encouraged to control the supply of opium to the areas. This would of course be very difficult to achieve, but should be attempted.

At the same time, the possible reactions of opium merchants should be thought through. They have a considerable vested interest.

Endorsement by religious authorities of initiatives to reduce addiction would be very helpful. The example already given by Sayed Mansoor Naderi is important to refer to and, because it was succeeding, to learn from (Naderi set up a programme to eliminate addiction in the area some six years ago which foundered during the present Mujahedin rule).

5.2 Treatment of Addiction

Each district needs trained personnel who can treat addiction and support addicts who wish to come off opium. They will need clinics with the required medicines and facilities. People we spoke to were very concerned that these medicines should remain available locally. Local health authorities might be involved in supporting this. So might some form of local networks. There would presumably need to be a strong educative component in any treatment programme.

Supervision and support for addicts after treatment will also be necessary.

5.3 Reinforcing Mechanisms

Measures which improve the general quality of life for local communities should in the long term remove or reduce some of the factors which contribute to the widespread opium addiction. To be effective in this way, these measures must include improving general health facilities and increasing food supply.

6 EDUCATION

In spite of their pressing day-to-day problems and lack of prospects, many people in these districts still feel very strongly about education, and are concerned to see the system restored. NGOs which are experienced in education within Afghanistan should be contacted concerning the possibility of their working in the three districts.

Educational initiatives should include adult literacy for women, organised on an informal, voluntary basis because of women's heavy workload.

7 ON EMERGENCY FOOD RELIEF

The situation in the three districts does provide grounds for some form of emergency food relief targeted on the most vulnerable. Food shortages begin to bite in late winter and persist into the spring (until the next harvest), and can be very severe. Because it may not be possible to deliver food in early spring (owing to weather conditions affecting roads, transport and travel) it is vital to bring food supplies into the areas before winter, preferably by mid-October.

However, for the reasons given below we recommend food relief should be in the form of food-for-work on projects which would contribute to long-term solutions to the core problems of food shortage and food production.

- Emergency food relief is most appropriate as a response to temporary situations (such as a natural calamity, earthquake, locust invasion, acts of war etc). In theory at least, the relief allows those who are affected to get through the calamity, and pick up again on their own without outside help. But the situation in the three districts has not come about suddenly and is not short term. It is a continuing permanent and worsening emergency in which communities have progressively become less able to produce enough to feed themselves. Food relief addresses only the symptom of a long-term problem, inadequate food production, not the problem itself.
- Emergency food provision in the districts could easily create dependency (we noticed this attitude in some villages), and sustain rather than alleviate the present problems of inadequate food production.
- It is difficult to ensure that relief goods reach those who need them most, even when they are handed out to them directly. The powerful and influential find numerous ways to take their cut, “for requesting the relief”, “for permitting the relief”, “for guaranteeing the convoy’s security”. The poor who need the help desperately will almost always yield to these pressures.
- While “charges” on food relief are common, “charges” on food-for-work are less customary. Those who need this help are more likely to get it.

APPENDICES

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APPENDIX I: FARMING

1 ISHKASHIM DISTRICT

The centre of the district is also called Ishkashim and is 2,650 metres above sea level. There are 26 villages in the district, of which about half lie toward the north, in the direction of the district of Sheghnan, and half lie toward the west, in the direction of Zebak. The northern villages are lower lying than those in the centre of the district and villages toward the west are generally higher than those in the centre.

1.1 Climate and Seasons

Ishkashim has a cold climate. The summer temperature reaches 28 but drops to -26 °C in the winter. The district experiences heavy snows, frequent strong winds and sudden changes in the weather. These factors slow plant growth during the growth season. Frequent rains in the spring can delay sowing time, which in turn makes crops more vulnerable to early frosts and increases the likelihood of their being damaged or even destroyed.

The growth season is from early April to mid October. Sowing takes place from early April to early May and the harvest from mid September to mid October. Lower villages harvest about 20 days before the district centre which likewise harvests before the higher villages in the west.

1.2 Agriculture

Land

Agricultural land in Ishkashim is flat and sloped; some sloped fields are terraced. Most of the agricultural land of the district appears to be in the villages surrounding the centre of Ishkashim. Further away from the centre, you can see sown fields on higher hills and on land between the hills (which is irrigable land).

Soil texture in more level fields is finer and softer than in sloped fields, where the soil may contain gravel and is generally less fertile. Farmers used both animal manure and chemical fertiliser in the past, but chemical fertiliser has not been available for the last four or five years. Farmers use animal manure for their important or preferred crops as there is not enough to cover all their fields.

Crops and Yields

The main crops of the district are wheat, barley, millet, horse beans, vitch, green beans and flax. The wheat consists of two local varieties called *safidak* and *sorkhak*. Horse bean is mostly cultivated to provide primary food.

In the past people considered Ishkashim as the granary for its neighbouring districts, Sheghnan, Wakhan and Zebak (some even included Faisabad). At that time yields were considered quite satisfactory because they were 70–80 seers per jerib (2,450–2,800 kg per hectare). But over the last 10–15 years, and particularly

in the last three to four years, yields have declined. The reasons for the decline include more severe cold, a rise in crop diseases and pests such as rust and smut which affect wheat, worms affecting the horse bean crop, lack of chemical fertiliser and the prevalence of weeds. Present wheat yields are 25 seers per jerib (875 kg/ha). This is a drop of nearly one third from the previous level.

There is a lot of rain-fed agriculture on higher hill tops. The wheat yield on these fields averages 15–20 seers per jerib (525–700 kg/ha).

Far from exporting wheat to its neighbouring districts Ishkashim now imports wheat from the province of Takhar through Faisabad or from Pakistan through Zebak district (but not in bulk because of restrictions by the Pakistan Government).

Potatoes are the only vegetables generally cultivated, and they give good yields. Other vegetables occasionally cultivated are carrots, turnips, radish, beat, spinach, coriander, lettuce, tomatoes and *noosh piaz* (young and premature onions). They are used domestically and are not sold. There is no market for them. This is a change from the past when potatoes, carrots and a few other vegetables were more extensively cultivated and sold to military personnel in local garrisons as well as to government personnel in the area. Those jobs have all but disappeared. Onions are cultivated on a very limited scale; the very cold climate prevents the onion bulbs from forming.

Tobacco is another local crop. Families dry it in the sun and use it in water pipes or as snuff. Surplus tobacco is sold or exchanged in the market.

Opium is cultivated sporadically on small plots for private household use. The crop has a range of uses. Oil is extracted from the seed and used for cooking and the seed pulp is fed to domestic animals. The poppy capsules are slit and the opium resin which seeps out is scraped from the skin of the capsule with a special blade. The stem of the plant is burned as fuel and soap is made from the ashes. The plots where poppy is cultivated are well kept and weeded thoroughly. The crop rotation involved also enriches the soil.

Of the fruits grown in the district, apricot seems the most common. Apple, blackberry and walnut trees can also be seen in some backyards but the cold often prevents the fruit from fully ripening. Other trees in the area include varieties of willow (*khar-bid*, *sia-bid*, and *zard-bid*), poplar (*aar-aar*, and *safid-dar*), and thorn trees. They are all reasonably adapted to the conditions. *Aar-aar* and *safid-dar* poplars grow to ceiling-pole size in eight to ten years.

Where there is enough water families maintain nurseries of both fruit and non-fruit trees, such as poplar and willow. The plots are surrounded by thorn plants to protect the trees. Any timber which is surplus to the household's needs is transported to Baharak and Faisabad markets. Willow trees and thorn plants are used as fuel wood. People also collect bushes and animal dung for fuel (the need for fuel thus competes with the need for animal manure).

Practices

Traditional cultivation consists of spreading manure and deep ploughing. The field is then sown and a level pulled over it to flatten the ground and reduce water run-off. Oxen are used as the draught animals and the implements are the

Malaria is not a problem. An epidemic, possibly measles, began in Wakhan in November 1994; by the time it receded in June 1995 the disease had killed hundreds of people – 57 in one village of 47 households alone. “Measles” had also killed many people in Sheghnan that same year.

There are very few medical facilities. There is only one doctor in Ishkashim, one in Sheghnan, and none in Wakhan. There are some clinic buildings in each district but no facilities (except for limited facilities in Ishkashim). The few medicines available are beyond the reach of many local people. There is little help from outside. For instance, it took seven months for the health authorities in the provincial capital, Faisabad, to become aware of the “measles” epidemic in Wakhan. Their response was that the area was too remote for them to send staff to diagnose the disease. *No vaccinations have been carried out in the area for several years.*

Given the lack of medical help, it is not surprising that so many babies die. Girls commonly get pregnant at 16 and often lose their first two babies. We heard of women who had had ten children and only one child survived; one woman had had 21 children, of which only four had survived. Some villages were short of traditional birth attendants. Surprisingly, we were told that maternal mortality was not a serious problem. Mothers still wrap new-born babies in a cloth spread with powdered sheep-dung for warmth.

People seemed rarely to wash themselves or their clothes. This, coupled with the custom of sharing bowls of food and eating by hand, must speed the spread of disease. Drinking water was often contaminated, although people do use the clean springs in Sheghnan and Wakhan when they can.

2.4 Shelter and Clothing

Overcrowding was reported as a problem but we did not come across anyone homeless. The traditional mud-and-stone houses are smoky and stuffy (and must contribute to the respiratory problems common in the area). Most of the clothing we saw people wearing was threadbare or heavily patched. Many people in Wakhan were barefoot (even in the colder weather).

2.5 Fuel and Energy

Wood, peat and dung are the main sources of fuel. Wood is not at the moment a sustainable source (deforestation is a major problem in the area), and using animal dung for fuel deprives the soil of vital fertiliser. Electricity used to be available in Sheghnan from Tajikistan, but was cut off when the Afghans couldn't pay the charges which Tajikistan levied when the Mujahedin came to power. A few houses were using ingeniously designed water-driven generators to supply electricity. There is enough water in all three districts to power flour mills and, in Sheghnan, mulberry mills. There should be scope for more hydro-electric schemes.

2.6 Opium Addiction

Opium addiction is a major problem and is so widespread that it is displacing vital expenditure on food in all three districts. We estimated that there is at least

traditional ploughshare, level and yoke. Very sloped fields are also shallow ploughed after sowing to ensure the seeds are covered. The narrow strips produced also help irrigation on the slope.

Weeding is common and is usually carried out by women. They remove weeds such as wild sesame, *Glyserhezia glubra*, oats and reed, called locally *nal-chok*. They pay particular attention to crops such as millet which cannot yield results without weeding.

Ishkashimi farmers have understood the importance of crop rotation and practice it: wheat for one year, followed by horse beans, and then wheat again. Opium is included in the rotation, where grown.

Some farmers are too old or ill to cultivate their land, or may not be able to do so because they have consumed their planting seed, or sold their oxen. In this case they will hire another farmer to work with them on all the farming activities. They give the worker his daily meals plus clothing for the nine-month season, and 70–100 seers of grain (490–700 kg) at harvest.

Qoroghma, protecting crops from livestock and birds, is another farming occupation. At the end of the season the *Qoroghmali* is paid 100–120 seers of grain (700–840 kg), depending on the area he has watched, but no clothing or daily food.

A land owner who can't work his own land can also resort to *paassira*, or share-cropping. He puts his land at the disposal of the share-cropper who provides seed, draught animals, and manure, and does all the work. The harvest is divided in half between the share-cropper and the owner.

Before Mujahedin rule, the Ministry of Agriculture worked in the village of Ganjabad, Ishkashim. They ran demonstration plots for improved wheat and vegetables as well as fruit nurseries. These were said to have been very useful and educational for the farmers. Only the government building and the land are left (some of which has been taken over by richer local farmers).

Irrigation

Irrigation water mainly comes from the Ishkashim River through a network of canals which may stretch for several kilometres. Occasionally irrigation water comes from streams fed by the melting snow on nearby hills or valleys. Most villages have abundant water, enough to power the many grain mills. Only three villages, Bazgeer, Sokmal and Sar-jangal, are short of irrigation water, acutely short during hot summers or in drought years.

Fields are irrigated by letting water from irrigation channels flow across the fields, soak in, and then allowing the water to leave the fields when they have been irrigated. Many fields are sloped and do not absorb enough water. Their gravel-ridden soils need more water than they can get through this method. A further problem is that the irrigation water generally washes down some nutritious soil, thus depleting soils higher up.

1.3 Animal Husbandry

Sheep, goats, cows, horses and donkeys are the main livestock kept. Some households also keep a few poultry. Livestock are grazed in pastures near villages, or farther away if there is not enough pasture nearby. Herdsmen, or others, take turns to drive animals belonging to several households to summer pastures, where they stay until early September.

Ishkashim has less pasture than Sheghnan or Wakhan. Villages such as Darwand, Sar-jangal, Khoshpaak, Sokmal, Bazgeer and Sorkh-dara do have sufficient pastures but generally shortage of pasture limits the number of animals people can keep. Shortage of winter feed and winter sheds, and diseases further limit the size of livestock holdings. During the winter, people feed wheat, barley, vitch, green beans, and sometimes horse beans to their livestock. They also feed them grass which they have gathered during the year from along streams, and anywhere else they can find it.

Animals suffer from diseases such as black leg (foot and mouth disease), liver worm, and spleen problems. Under the previous government, teams used to vaccinate livestock but there are now no veterinary services in the area. Some farmers buy tablets from the market in Ishkashim or Faisabad to treat liver worm. The tablets are expensive.

Animal products include meat, which households consume themselves. Some ghee and whey is offered for sale. Wool is mostly used to meet the needs of the family and consist of *gleem* (a coarse rug), felt rugs, and knitwear. Skins and Live animals and animal skins are sold to itinerant merchants, usually at quite low prices. Eggs are occasionally sold on the market. Animal dung is used as fuel and manure.

The low agricultural yields of the recent decade or so, and especially of the last few years, have caused families to sell more livestock to procure food (mainly grain and particularly wheat). This has kept livestock holdings down. The expansion of animal husbandry in Ishkashim is further limited by shortage of grazing and of winter feed.

1.4 Conclusion

Ishkashim has enough agricultural land and water to enable it to produce enough grain and vegetables for its population. Ishkashim had been a food surplus area and was seen as the granary for the neighbouring districts of Sheghnan, Wakhan and Zebak. This is no longer so. The abnormally harsh climate, diseases, pests, losses from weeds, lack of chemical fertiliser and of agricultural services have taken their toll. Together with the declining resistance of local varieties and the limitations of traditional agricultural practices these factors have brought yields to all-time lows. Thus Ishkashim is not only no longer a food surplus district but is now a food deficit area.

The expansion of animal husbandry is limited by insufficient pastures, shortage of winter fodder and winter sheds, and disease and pests. The pressures to sell livestock to procure grain also keep the size of holdings down.

Even though several plants such as potato, carrot, turnip, tobacco, fruit trees, and varieties of poplar are fairly well adapted to the conditions, they are not widely

cultivated. The main reason is the area's remoteness from markets and the lack of a reliable road.

2 SHEGHNAN DISTRICT

2.1 Climate and Seasons

Sheghnan has a cold climate with frequent heavy snows in the long winters. Snows begin in late October and continue through April, sometimes into May. Snow can reach a depth of three metres in the pasture region of Shewa, the coldest part of the district. Local people have a saying, "We have no spring or autumn because we are covered with snow."

The altitude of the district ranges from 2,000 metres to 3,200 metres, with Behshar, the district centre, having an altitude of 2,250 metres. The weather follows the altitude and becomes progressively warmer as you go from the higher villages in the south, approaching Ishkashim District, to the lower villages in the north near Darwaz District.

Despite the cold climate and the high altitude the growth season does favour the local crops, including grains and vegetables. Cultivation begins in late April and the harvest is finished by mid September.

2.2 Agriculture

Land

This district is populous and is short of irrigable land. The village of Viar is an exception. It has so much land that it is called the farmhouse of Sheghnan. Most villages are along the Amu Darya, flanked by the river to the east and by mountains and steep hills to the west. The majority of fields are on plains near the river; there are some fields on higher plains and even on hills toward the west. The area between the river and mountains is up to a kilometre wide. Some fields are terraced. Every bit of available land is cultivated, sometimes involving back-breaking work.

The changing water levels continually threaten agricultural land along the river and damage crops and fields (sometimes irretrievably). In recent years the river has changed course. Flood protection structures built on the Tajikistan side of have diverted the river water toward the Afghan side, as in the village of Dehmurghan which is having severe problems with flooding.

Families also cultivate rain-fed fields, mostly situated in the high altitude Shewa region (site of the famous Shewa pastures) where the villages of Dowlat Shahee, Khinj and Shewa are located.

Generally the soil consists of fine earth in the lower plain areas. The sand and gravel content increases in higher and more sloped fields, where the soil is less rich.

Crops and Yields

About one third of the total irrigable agricultural land is devoted to orchards, mostly of fruit trees and usually on more sloped land. The remaining irrigable land is allocated to crops, which are grown on the best land whenever possible.

The main crops grown in the district are wheat, barley, rye, vitch, green beans, horse beans, millet and peas. We also saw corn in some villages. All these crops are cultivated in the spring. Wheat is the only crop sown in both spring and autumn. The wheat varieties grown in the area are *Ishkashimi*, *pandokee* and *fall*. The *Ishkashimi* variety yields the best results for spring sowing and the *fall* variety for autumn sowing.

On the whole, wheat yields in Sheghnan are poor. Horse bean gives higher yields per unit of land than wheat. For example, one seer (7 kg) of planted wheat seed yields about 8-10 seers, whereas one seer of horse bean yields about 15 seers on the same land. However, all grain yields are generally low. This is the main reason why Sheghnan cannot produce enough grain to feed its large and increasing population. They face three to four months of food deficit annually. They have to try to make good the deficit by buying wheat and other food from the markets of Baharak, Ishkashim and Faisabad.

Many factors cause the low crop yields: climate, low yielding local varieties, lack of improved seed varieties, crop diseases and pests, rapid growth of weeds and lack of weeding, poor soil quality (inadequacy of soil nutrients), and inefficient techniques. The district's inaccessibility also prevents the import of materials which might help improve yields.

The seeds sown in this district are all local varieties which over time have lost their resistance to climatic and environmental factors and have become susceptible to disease. Rust, which affects the leaves and stem of the wheat plant, and smut, which causes the seed to become a black powder, were the most commonly mentioned crop diseases. Horse bean is affected by a worm which eats newly-formed seeds.

Early frosts, locally called *qargha-yak*, also regularly damage crops. The frost occurs during the second week of September and especially harms late-sown crops such as millet.

Fruit trees, especially mulberry, are planted wherever possible. Mulberry is a staple food in Sheghnan and apparently every family has at least some mulberry trees. They eat fresh mulberry from mid July until early August. Women collect mulberry with great care in the summer and then dry the fruit on specially prepared roof tops. Once dried and milled (then called *talkhan*) families store the mulberry and eat it in autumn and winter until it runs out.

Mulberry varieties include *muzaffery*, *shast*, *beedana*, *shah-toot* and *sheer-toot*. *Muzaffery* is considered the best quality. Other fruits grown include apricots (non-grafted varieties), apples (*rakhsh*, local variety), pears (*murghabee-naack*), walnut, blackberry and cherries. Some peach, plum and vine are also planted. Households sell what they don't need outside the district, including dried mulberries, walnuts, apricot nuts, tobacco and cumin.

The orchards are overcrowded and the trees aren't pruned. This causes rapid vegetative growth and the fruit trees grow wild, reducing the quality and size of their fruit. Lack of spraying or other protection also makes the trees susceptible to disease and to insects such as aphids, spiders and codling moths. Fruit harvests suffer significant losses.

The non-fruit trees grown in the district include different species of poplar (*aar-aar* and *safeed-daar*) and willow, which are fast-growing and better adapted to the environment than fruit trees. They are not affected by diseases and insects. Willow trees grow straight, like poplars, and so are used for roof-poles. People cannot at present transport timber to markets elsewhere, and so use it domestically and for fuel wood (with animal dung and bushes).

Vegetables which might grow in Sheghnan are potato, tomato, egg plant, carrot, turnip, radish, spinach, coriander, onion, bean, pumpkin, melon, water melon, cucumber, and lettuce. Potatoes are the only vegetable sown extensively, because they are best adapted to the cold. Vegetables are sown in early May and can be harvested toward the end of August. Vegetable yields are very low because vegetables need more care, such as weeding, than local people give generally give them, and need better irrigation than is available. There is no ready market for vegetables.

In 1961 the Ministry of Agriculture began an extension programme in Sheghnan district. It set up demonstration plots for vegetables such as potatoes, tomatoes, peppers, turnips, carrots, okra, radish, cucumber and spinach. It also established plots for *Larmarhu* and *Maxipak* wheat varieties. Over several years Ministry staff studied the suitability of the different varieties for local conditions and found some were well-adapted. For example, the weight of one tomato was recorded as one Kabul pow (437.5 g) and the yield of one seer of wheat was recorded to be 60 seers per jerib (2,100 kg./ha). Farmers preferred the *Larmarhu* variety of wheat because it gave more hay as well as better yields than the other variety.

Practices

Villages such as Viar, Ghar-Jaween, Arahkt, Pastiv, Do-aabe-shewa, Dowlat-shahi and Khinj, are too cold for autumn sowing and only spring sowing is practised. When the weather is favourable, spring sowing begins in late April and the crop is harvested by mid-September. In relatively warmer villages both autumn and spring sowing take place, with better results from autumn-sown wheat. Autumn wheat is sown in late September and its harvest reaped in late July.

Crop rotation is practised. Another common practice with grains is to sow a mixture of two or three different crops simultaneously, such as rye and horse bean, wheat and rye, or rye, horse bean and green bean. In the village of Dehmurghan four different crops were sown together – wheat, vitch, horse bean and rye. The harvest of course occurs at the same time. A favourite mix is rye and horse bean which is milled and used for making *aash*, the main daily food.

Chemical fertiliser is not available locally and farmers use manure on the land, but there isn't enough available because the manure is also used as fuel. The mixed cultivation and crop rotation are therefore important in replenishing the

soil, but are not practised sufficiently and cannot make good the loss of nutrients from the soil over time.

Weeds compete with the main crop for soil nutrients. Oat, cuscota, wild alfalfa, a reed type plant, and even *Glyserhezia glubra* can all be seen in the crop fields. Weeding (performed by women) does help to clear the weeds but does not remove them completely.

Irrigation

In spite of abundant snow and therefore water in most parts of the district, several villages face water-shortages in the summer, including Behshar (the district centre), Sar-Cheshma, Deh-shahr, Shadoojo and Viar.

A lot of water is wasted in inefficient irrigation systems. The simple irrigation canals are very vulnerable to floods and it takes a lot of time and effort to repair them. Interruptions to water supply can be serious, affecting drinking water and water for household use as well as farming; in villages such as Darwand and Neecham people have to carry water from the river. The sandy, gravel-ridden soils also lose a lot of water through seepage and thus need more water than better soils. Thus what often starts as an abundant supply of water all too often becomes a scarce resource requiring the services of a mehraboshi (water controller) to share it out.

Shortages of water commonly damage crops in August. Wheat reaches its milk stage at this time and needs a lot of water. Because of the hot weather the wheat plant transpires heavily and if it does not get enough water the seed becomes hollow, thus lowering the yield drastically.

Water is used to power flour mills and in Sheghnan to power mulberry mills which are similar in design but smaller. A lot of people were aware of the potential for micro-hydro power. One household in the village of Dehmurghan had installed an ingeniously designed system.

In spite of the lack of roads, the people of Sheghnan do take some surplus dried mulberry, walnut and apricot nuts to markets in Baharak and Faisabad.

2.3 Animal Husbandry

Animal husbandry is the second main occupation in the district and most households raise a few livestock. These include sheep, goats, cows, horses and donkeys (the last two for transport). Only a few families have large livestock holdings. Most of them live in the villages of Shewa, an area of Sheghnan famous for its vast pastures.

Livestock, particularly milk cows, are mostly grazed near villages. Those with larger numbers of animals take them to the Shewa pastures for the summer. Families take turns to drive animals from several households to these pastures, or hire shepherds to do so. In the village of Dehmurghan, for instance, we found that only eleven out of the 64 households in one part of the village grazed their animals in the Shewa pastures.

The Shewa pasture region is extensive, including some 200 pastures of various sizes situated on rolling hills and occasional flat plains. Many large herds from

the provinces of Takhar, Kunduz, and Baghlan are brought to these pastures. Their numbers far exceed those of local animals. Villages close to Shewa, such as Viar, Darmarakht, Arakht, Pastiv, and Ghar-Jaween, bring their animals to graze on the Shewa pastures, as do some of the villages near the district centre. Villages in the Shewa zone, namely Shewa village, Khinj, and Dowlat-shahi, all graze their herds here and households have large holdings, averaging up to 200 per family. There is no irrigable agriculture in this area; all the fields are rain-fed.

The grazing period is from May until September. Grazing starts first in the lower hills and as the weather warms and the snow melts at higher altitudes moves to the higher zones. Many livestock owners stay in the pastures with their families for these four to five months.

Shepherds hired to care for livestock during the warm season provide the livestock owner with a portion of the products, which typically might be five kg of cooking oil and one kg of whey for each animal grazed for the season.

Collecting feed for the long winter (October–March) takes a long time. People gather all kinds of plants and grasses from hills, fields and from along creeks and canals, and then store them for the winter. The plants include wild and perennial plants such as *taran* and *oghaan*. *Oghaan* is eaten by sheep and goats, a little by cows but not by horses. Alfalfa is also raised, collected and stored as winter feed.

In spite of the few animals which families generally possess, animal husbandry products are the second major source of income. Food products include milk, yogurt, whey, cheese, ghee and meat. Other products include hides, wool, and woollen handicrafts (such as knitwear, gleem, felt rugs, and *taan*). After meeting their own needs, families usually sell the remaining products and live animals to obtain grain and other goods. In this way the animal husbandry sector continually compensates for shortfalls in local grain production, but when harvests are bad the number of animals held goes very low.

Other problems which limit livestock numbers are animal diseases and parasites, including black leg (foot and mouth disease), anthrax, respiratory diseases, anthrotoxima, liver worm and viral diseases. Ticks are another problem. Overcrowding animals in small sheds causes anthrotoxima and spreads other diseases among livestock, contributing to the significant losses. In 1994 anthrotoxima killed 190 livestock belonging to 17 households in the villages of Upper Chaasnood (Chaasnood-e-Olya) and Neva-dek.

There are no veterinary services. Some farmers use DDT to treat blackleg and buy tablets from Faisabad to treat liver worm. They also use a plant called *zirk* to treat the worm.

The extreme winter cold, shortage of winter feed, and the shortage and poor condition of winter sheds also make it difficult for people to maintain their livestock numbers. Losses from disease and the sale of animals to buy grain take animal holdings dangerously low, and may make recovery to previous levels difficult or impossible.

Sericulture, the raising of silkworm, would be possible in the climate, given the availability of mulberry leaves, the silkworm's food. Sericulture is already practised across the border in Tajikistan. However, any extensive removal of leaves would weaken the mulberry tree itself and drastically reduce if not ruin

the mulberry yield. As mulberries are an important staple food for the Sheghnis, it would not be possible to use the leaves to feed silkworm in significant numbers.

2.4 Conclusion

There are two main constraints on Sheghnan's agriculture. One is the severe cold and the other is the amount of agricultural land relative to the population. Even if the altitude and climate were more favourable, Sheghnan could not become self-sufficient in grain. The food deficit has to be made up by importing grain from outside the district but the lack of a road makes transportation difficult and expensive.

Sheghnan's climate is more suited to growing fruits. Most people do have orchards or at least a few fruit trees, especially mulberry, a staple food in the district. Other fruits include apples, apricots and walnuts. Fruit yields are low due to the trees' susceptibility to pests and disease. Insufficient water and manure, climatic fluctuations and the shortcomings of agricultural techniques further reduce the yields.

Animal husbandry, the second main occupation in the district, is also beset by problems: the climate, parasitic diseases, shortage of winter feed and inadequate winter sheds. A lot of animals die, and as most families only have a few livestock, holdings get dangerously low.

Improving the yields of agriculture and animal husbandry is the only way to bring about any tangible improvement in the present way of life of most people in the district. One necessary step is to set up agricultural and veterinary services in the area and maintain them in the long term.

3 WAKHAN DISTRICT

Wakhan is nearly 300 km long and is very mountainous. The Amu River runs along the district, forming much of the border between Afghanistan and Tajikistan.

3.1 Climate and Seasons

With altitudes ranging from between 2,540 metres in the village of Fatoor (the first village in the west of Wakhan) to over 4,000 metres in the Pamir, Wakhan has a severely cold climate. Based on elevation and topography Wakhan can be classified into the following areas:

- 1 Areas whose elevation ranges from 2,540 to 2,950 metres, which includes the villages of Fatoor, Qazee-Deh, Wirk, Eshkhor, Wargand, Pegash, Khandood (the district centre), Eshmorgh, and Qala-e-Panja. The first four villages have a warmer climate than the others. Little rain, a lot of snow and heavy winds are characteristic of these areas.
- 2 Areas with elevations ranging from 2,950 to 3,300 metres, which includes the villages of Ogarch, Gaz Khan, Sast, Shilk, Baba-Tangee, Krot, Rorung, Nesh Khowr, Patogh and Sarhad-Broghel. These areas are much colder. Plant

growth is not only slower but in some years the growth season is too short to allow any growth.

- 3 The third area is the Pamir, which has an elevation of 4000 metres or more. The high altitude, severe cold and abundant snow prevents any agricultural cultivation. This area has extensive pastures and animal husbandry is the sole activity.

Owing to Wakhan's high altitude, the growth season is short, so short that plants sometimes die before maturing. For example, wheat can be sown from early May to early June. If wheat is sown in early May, the cold may damage the plant before it can form its tiller and it will be bent and grow that way. Local farmers call this situation *chapak* (bent or turned over). However, if wheat is sown in early June when the weather is more favourable, cold during the heading period may halt the plant's growth so that the plant does not form seed.

3.2 Agriculture

Land

Agricultural land in the long narrow valley of Wakhan is limited. The soil quality is poor, mostly gravel, sand and silt which has been formed by floods coming from numerous gorges and steep narrow valleys. The soils are so low in nutrients that even after adding animal manure yields will be low. People do not use chemical fertiliser.

Agricultural lands are less sloped and more extensive at the western end of Wakhan up to Qala-e-Panja village, where the valley is wider. From here to Sarhad-Broghel, the last village of Wakhan, the valley narrows and becomes more mountainous and farm plots become smaller and more numerous. The Pamir to the east is composed of rolling hills and meadows (with salty soils in some places).

On average, households have two to three jeribs (0.4–0.6 ha) of good land which they cultivate each year. The remaining plots are called *dashtee* and are used alternately (left ploughed one year and cultivated the following year).

Crops and Yields

Crops commonly grown are barley, green beans, horse beans, *patek* (vitch) and local wheat varieties (*sorkhak* and *safedak*). They are sown from April until early June and harvested in early October.

People in lower areas of the Pamir and western villages of Wakhan cultivate some tuber vegetables such as potatoes, turnips, carrots, beats and radish, potatoes being the most common. Potato plots are first ploughed and then shaped into rows, and potato seed sown on one side of the strip. The cold weather, the long winter and storage problems limit potato cultivation. Families grow onions but eat them before they have matured because the cold prevents onion bulbs from forming.

Yields in this area are poor, about 20 seers of wheat from one jerib of land (700 kg/hectare). Millet and vitch yields are reported to be better than wheat yields. All grains are milled into flour which is used for bread. Farmers told us that the

cold drastically reduces yields. In normal years they can obtain about four to five seers of yield from one seer of seed [1 seer = 7 kg]. In a cold year they expect no more than two to three seers of yield from one seer of seed. Sometimes they cannot even get back the seed they sowed.

We were told that the weather has been colder than normal over the last four years, both at sowing time and during the growth period, resulting in lower yields or no yields at all. We experienced the cold for ourselves, spending a very cold day and night in the village of Qala-e-Panja on 22 June 1995. We saw new snow on the surrounding hill tops – this was at time when all the local crops such as barley, green peas, horse beans, *patek* (vitch), and wheat had been sown.

Apart from a short growing season, the other difficulties farmers face are a wide variety of weeds, crop diseases and pests. Weeds include *khaksheer*, wild sesame, wild alfalfa, cuscota, reed, and *Glyserhezia glubra*. The latter is a valuable medicinal herb, and in the past was an important export but has now become just a weed. Wild sesame and *khaksheer* affect legume crops such as horse beans, green beans, and *patek* (vitch). The weeds consume valuable nutrients and reduce crop yields. Farmers do occasionally attempt weeding and the task is performed by women, but weeding is not a common practice.

Crop diseases such as rust and smut affect both local varieties of wheat (*sorkhak* and *safedak*), which are sensitive to the diseases. They affect the tiller and ear of the plant and do a lot of damage. Another pest which does a lot of damage is locally called *gard-zada-gee*. It afflicts wheat at its milk stage when the plant needs a lot of water to make up for transpiration losses in summer temperatures. The seeds shrink because the plant doesn't get enough water. Cutworm is another insect which damages green beans and horse beans when the plants are 15–20 cm high or when they reach flower stage. The worm destroys the leaves and the flower of the plants and sometimes even the seed itself.

In early 1997 the Ministry of Agriculture cultivated wheat, barley, turnip, carrot, and onion in four demonstration plots in the Pamir, at Langar, Dashte Mirza Morad, Qomotok and the Wakh-Jar valley (also called Te-kaley). Jangee Beg Khan had been the agriculturalist in charge but is now a government clerk in Khandood. He told us that only the potatoes and barley gave results, adding that animal manure, chemical fertiliser such as DAP (di-ammonium phosphate) and urea had been used on the wheat and barley plots and animal manure on the vegetable plots. The extension programme stopped when the regime changed in April 1978.

Trees normal for the area include poplar, (*aar-aar* and *safid-dar*), willow (with local varieties *sorkh-bid*, *safid-bid*, *sia-bid* and *khar-bid*), pine, *broch*, *gaz*, *khar* (thorns), and thorn bushes. Pine, *broch*, thorn trees, *gaz*, and thorn bushes also grow naturally in dwarfed form in the higher Pamir. Poplar and willow trees can grow in the lower elevations of Wakhan. It takes from 10 to 15 years for poplar to grow large enough to be used for roof poles. Apart from providing timber for houses, trees are used extensively for fuel. Many families keep nurseries to satisfy their need for wood.

one addict in half the households of Wakhan, and in two-fifths of households in Ishkashim and Sheghnan. Each year, one addict in an average ten-to-twelve-person household spends on opium at least the equivalent of what it would cost to provide wheat for the whole household for three to four months.

We were told that women and young children were addicted to opium. Opium does appear to be used from infancy as a pain reliever and cure for illnesses. Other reasons given for addiction were “to escape from the worries and pains of life”, “to cope with the misery of a bad marriage [women]”, “to cope with boredom, particularly in the long, housebound winters”, and “pressure from friends”.

Merchants bring opium into the area and make big profits from it; very little opium is cultivated locally.

There was little or no treatment for addiction available in the districts when we visited. Most people we spoke to were keen to eliminate opium addiction and said they would support initiatives to do so.

2.7 Women's Lives

Mujahedin rule has brought new restrictions and problems for women. Women in Sheghnan's district centre said they started wearing the *chadari* (full veil) to protect them from “the eyes of the Mujahedin”, and that there are instances of Mujahedin in Sheghnan “marrying” girls by force. Marrying girls to older men (for economic reasons) is now apparently more frequent, and fathers who are opium addicts are reported as selling their daughters in marriage to the highest bidder. The community strongly disapproves of this.

Women work very hard both in the home and on farming activities, but generally didn't seem to regard themselves as worse off than the men (“We are all poor. We all lead dogs' lives.”) There are few or no occupations for women outside marriage and the home. Teaching is now the only formal profession available for women in the area, but there are few opportunities. Girls are usually made to drop their education shortly before or immediately after marriage. Many women in Sheghnan resent this.

Women appear to head about ten percent of households in the area, either because they have lost their husbands through conflict or disease, or because their husbands have migrated for work. In some villages as many as half the households are woman-headed. The traditional division of labour makes life very difficult for such women. They cannot, for instance, plough their own land and must generally pay half their harvest to the male relative or labourer who ploughs it for them.

2.8 Services and Support

The previous Communist Government recruited heavily from this area and gave it substantial food and other subsidies. The withdrawal of the subsidies and dramatic reduction in government employment in the area have caused many families severe hardship.

Practices

Farmers usually add manure before ploughing their soil because of the soil's weakness. However, since plots of land are most often sloped, irrigation washes manure and soil downward, thus depriving plants on the upper levels of nutrients. Terracing with this kind of soil and with the current farming methods would be difficult if not impossible because the soil is too shallow.

Traditional cultivation of grains consists of first irrigating the plot, and then at *watr* (the time when the soil becomes just right for ploughing) ploughing using a pair of oxen pulling a ploughshare. The grain seed is then broadcast and the plot ploughed again to cover the seed and aid irrigation.

Even though farmers add manure to the soil they also observe crop rotation. On poor quality fields, which farmers call "desert fields", the rotation consists of one year's wheat cultivation; ploughing the land after the wheat harvest and leaving it fallow for a year; sowing peas, BAAQLA, and *patek* (vitch) in the next year; then sowing wheat again in the following year. The rotation on better quality plots is wheat, then horse beans or green beans, followed by wheat again.

Irrigation

There is abundant water in Wakhan and all the agriculture is irrigable. Water comes from snow-melts which flow through natural creeks and rivers and are directed into traditionally-built canals, supply drinking as well as irrigation water. The fast-flowing water in this mountainous area and the floods which result from sudden rises in temperature frequently damage irrigation structures. Cleaning and repairing the structures is time-consuming. Floods also deposit sand and silt on fields, which causes the soil quality to deteriorate over time.

3.3 Animal Husbandry

While Wakhan's climate on the whole doesn't favour agricultural activity it does provide for pastures, enabling extensive animal husbandry, which is the second main activity of Wakhan and the sole activity in the Pamir. Families keep sheep, goats, cows, donkeys, yaks, horses and camels.

Horses, donkeys, camels and, in the Pamir, yaks are used for transport, and oxen for ploughing. Families eat meat and dairy products from their animals. Apart from dairy products, wool from the animals is used to weave *gleem* (a coarse rug), to make felt rugs, ropes and woollen knitwear. Women play an important (possibly the main) part in animal husbandry. As well as being involved in keeping the animals, and their reproduction, they collect and prepare the animal products. They also collect and prepare dung for fuel.

As agriculture cannot provide them with the food they need, Wakhis have to import food such as wheat, rice, barley, tea, and salt (as well as of course other household goods and opium). They normally trade their livestock, and some of their animal husbandry products, for the food they need. Because Wakhan is remote and inaccessible these transactions are carried out in barter form through itinerant merchants, who are usually from other parts of Badakhshan. The merchants offer the Wakhis pitifully low prices and take the animals to other provinces, to Kabul and even to Pakistan, where they sell them at considerable

profit. Many families with small livestock holdings find it very hard to make a living.

Although Wakhis know about poultry, few keep them. The severe cold, scarcity of grain and the existing livestock and its dairy products were given as the reasons for this. We saw some chickens in the western villages of Wakhan and in Qala-e-Panja.

There are several ways to graze livestock in Wakhan. Very often there are small pastures near villages, particularly in the west of Wakhan. People who have a few animals graze them in nearby pastures, sometimes banding together with other families to hire a shepherd if they are short of labour. In return for tending the animals the shepherd receives his keep, some of the dairy products and a live sheep in payment. Wealthier farmers employ full-time shepherds.

In the centre and east, animals are more generally grazed in the Major and Minor Pamirs respectively. All these pastures are natural pastures; alfalfa, clover and other grasses are not usually sown. Livestock taken to the Pamir are tended by shepherds for about nine months. A shepherd tending an average-size flock receives one sack of whey, 22 seers (154 kg) of wheat and three sheep per year; he can also eat meat and dairy products from the herd for the nine months. Shepherds do not sell animals to itinerant merchants; the owners go to the Pamir to transact the sales themselves.

Some large livestock owners help very poor families by providing them with a few livestock to look after. The families can use the animal products but any additional animals born are the property of the owner. The poor family can subsist in this way but is otherwise no better off, while the owner gains livestock.

There are a lot of livestock in the Pamir and collecting winter food for them is no easy task. During the winter the Pamirees try to graze their livestock on hillsides which face the sun and have less snow cover, enabling the animals to eat the dried grass. The winds in Wakhan, and particularly in the Pamir, blow away the ground snow.

The Kirghiz People

The Kirghiz people live in the Pamir. Animal husbandry is their only occupation. Wealthy livestock owners are called *bays*. The Minor Pamir has two prominent bays. The bay living in the Wakhjir Valley is Afandee Bay, who has some 2,000 sheep and goats and around 150 yaks. The other living at Me-na-ra (near the Chinese border) is Abdul Rasheed Bay who has around 1,000 sheep and goats and some 100 yaks.

In the past the major livestock owner of the Kirghiz people in Wakhan was Haji Rahman Qol who owned several thousand livestock and lived in the Minor Pamir. He did not allow livestock owners from other parts of Wakhan to bring their animals to graze in the Pamir and considered all the pastures of the Minor Pamir to belong only to the Kirghiz people. After the communist coup in April 1978 he migrated with his family to Pakistan and then from there to Turkey. After his migration the people of Wakhan started to take their livestock to the Minor Pamir for grazing and there have been no problems to date. Afandee Bay did hint at his desire to prevent such grazing in the future.

Diseases

The Pamir used to graze around 100,000 livestock. There are no veterinary services of any kind and no preventive measures to protect livestock from pests and disease. The animals are constantly afflicted, and some killed, by external parasites such as tick, internal parasites such as liver worm, diseases such as black leg, foot and mouth, anthrax, anthrotoxima, lung troubles, and viral diseases. These problems, together with the severe winters, shortage of winter fodder, and lack of winter sheds threaten the animal husbandry sector and constrain its expansion.

The people of Wakhan (including the Pamir) are not familiar with animal medicines and their livestock have never been vaccinated. When their beasts become sick Wakhis take them to the nearest shrine, walk around the shrine with the animal and appeal for its cure. To treat liver worm in sheep, farmers boil the central core of carrots and feed the liquid to the afflicted animal.

Families do not buy salt for their livestock because it is expensive and leave the animals to get salt from salty marshes.

The traditional way of sterilising an animal is to tie and hold it, slash the skin of the testis with a sharp knife, and pull or squeeze out the testicles and throw them away. The beast is then immediately let loose. It is not unusual to see dead animals lying on the ground. Dogs eat their flesh; the remaining skin and bones are a health hazard to humans as well as animals.

People stressed to us that animal husbandry needs more time and attention than agricultural work. There is no dormant period, as there is with agriculture; animal husbandry is a year-round activity. Animals need attention day and night, especially when young are born.

In addition domesticated animals Wakhan also has wild animals such as mountain lions, tigers, deer, bear, the famous marcopolo, and a small animal locally called *ondook*. In the beginning of Wakhan near the village of Qaazi-deh is a lake which has a special species of duck. The former king used to hunt there.

3.4 Conclusion

The high-altitude, narrow, mountainous valley of Wakhan only allows for small agricultural plots. The soil has a high gravel and sand content, and is low in nutrients. The animal manure which is applied to the fields is often washed away because of the slope of the plots, or seeps away and cannot benefit crops. Terracing is rare because the soil is too shallow to enable it. Primitive sowing methods, weeds and the prevalence of pests and diseases result in low yields.

To add to these problems, the growth season in Wakhan limits what can be grown and further reduces the poor yields. Wheat is particularly vulnerable. Even in good years Wakhan has an annual food deficit of some five to six months, and Wakhis have to import significant amounts of food.

Natural pastures have enabled extensive animal husbandry, which has become the backbone of the local economy. It appeared that all households have some livestock, with holdings varying significantly from a few animals, which do not meet a family's needs, to large flocks which require permanent shepherds to take

them to the Pamir for grazing because village pastures would not suffice. Wakhis exchange livestock and their products for food and other basics. Money transactions are rare. There is scope to expand animal husbandry in Wakhan once the problems of insufficient winter feed, lack of winter sheds, and pests and diseases are addressed.

The district's lack of roads and remoteness hinder any measures to improve agriculture and animal husbandry. It would be a formidable and expensive task to transport into the area improved seed varieties, chemical fertiliser, and even extension agents to, say, administer livestock vaccinations.

4 RECOMMENDATIONS ON FARMING

The food supply in the districts can be increased both through increasing food production directly, and through increasing the numbers of animals which can be sold to purchase food. We recommend the following measures:

- 1 Set up Afghanistan sub-offices in each district to carry out future programs.
- 2 Organise an extensive extension service to implement the following activities:
 - teaching sessions for farmers on sowing methods, and on maintaining and harvesting plants in a planned and systematic way;
 - seed treatment programmes;
 - teaching terracing systems using A-frames;
 - introducing plastic tunnels, better methods of sowing and keeping vegetables, and training farmers in the methods;
 - teaching appropriate ways to store vegetables, especially potatoes and carrots;
 - introducing better methods for irrigation and weed control, and better sowing times, etc;
 - introducing livestock owners to preventive measures against animal diseases (e.g. vaccinations), and discuss the main problems of animal husbandry.
- 3 Set up veterinary services through basic veterinary workers (BVWs) and provide facilities for them. Animal husbandry is one of the two main livelihoods in all three districts. It would be feasible to expand the sector: communities are very experienced in it, and it is one of the most immediate ways to improve the quality of life for many people.
- 4 Study existing woollen handicrafts, ways to improve quality, and the market potential for them.
- 5 Explore the possibility of making soap from animal carcasses. Soap is very expensive in Wakhan and many families never use it for this reason.
- 6 Set up demonstration plots for wheat, barley, corn, and a variety of vegetables to study their suitability for conditions in each of the three districts and then introduce them to local farms.

- 7 Explore the use of locally available substances such as tobacco, soap, pepper, kerosene, and limestone to make compounds to control pests in Ishkashim and Sheghnan.
- 8 Introduce environmentally safe chemicals to combat crop diseases and pests which cause severe damage, and help local farmers use them.
- 9 Carry out a demonstration apiculture experiment in Ishkashim and Sheghnan (which have the required flowers from April to October).
- 10 Study fruit varieties in Ishkashim through an experimental fruit programme.
- 11 Consider setting up a fruit improvement programme in Sheghnan.
- 12 Improve irrigation canals in selected villages of Ishkashim and Sheghnan, including building some new canals.
- 13 Study the feasibility of setting up micro-hydro power schemes.

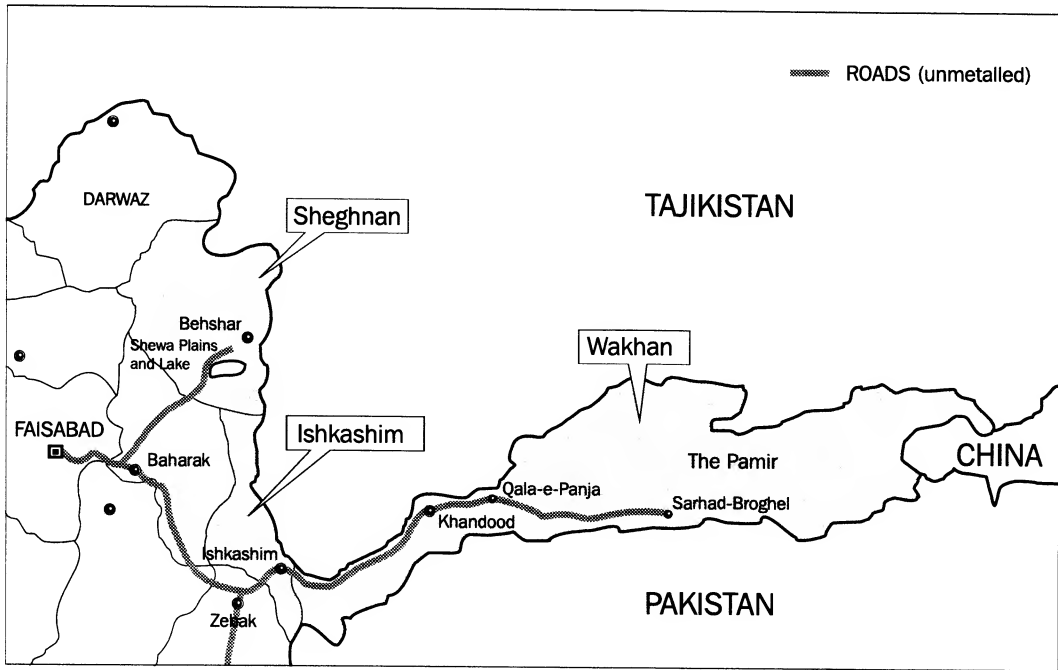
For these improvements to be sustainable, the use of inputs, particularly from outside the area, should be kept to a minimum. The emphasis of the programme should be on improving techniques and know-how.

Most of the activities recommended could produce results if they are carried out as part of a well thought-through extension programme. Such a programme would need to have qualified and experienced personnel, equipment, teaching materials, posters, diagrams, charts, simple brochures and pamphlets. The success of the activities will depend on local farmers themselves spreading the improved methods.

APPENDIX II: ROADS AND IRRIGATION

This appendix is concerned with road links to the three districts of Ishkashim, Sheghnan and Wakhan and some irrigation problems in the three districts. These matters will be considered in that order.

1 ROADS



1.1 Baharak to Ishkashim Road

When this road is motorable it serves the needs of all three districts, Ishkashim, Sheghnan and Wakhan. The first half of the road also serves the district of Zebak and beyond. As the road approaches the centre of Ishkashim it passes through or near five or six villages. Several villages near the centre of Ishkashim also benefit from it. However, the villages toward the north, including the large village of Gharan near the Sheghnan border, are not served by the road. The possibility of a road to these villages and on to Sheghnan will be explored below.

The road branches in two directions near the village of Gul-khana in Zebak. One branch proceeds to Ishkashim and from there continues to Wakhan. The other leads through Top-khana, over the famous Shah Saleem Pass, and into Pakistan.

We looked over the entire road from the town of Baharak to Ishkashim and surveyed the most vulnerable points along it. They include six sites:

ZOO VILLAGE WASH (BRIDGE) is 28 km from Baharak and does not have continual water. The slope of the wash is so steep that the road gets washed away during seasonal floods, making it impassable. A bridge or a permanent masonry wash should be built to solve this problem.

SOFIAN RETAINING WALL is 35 km from Baharak. At high river levels the road is completely under water. A 500 m retaining wall would prevent this.

SANG RETAINING WALL is 40 km from Baharak. At high water levels the river completely blocks the road (even to horses). A strong 110 m retaining wall is needed.

AWDOW WASH is located near Kawek village and is 58 km from Baharak. Frequent seasonal floods destroy the road each year, stopping traffic. A wash should be built to keep the road open.

SHAKH SAFID KAWEK RETAINING WALL is 59 km from Baharak and during high water levels the river blocks the road for several weeks. A 300 m retaining wall would solve the problem.

ROBAT WASH is near Robat village and some 65 km from Baharak. Seasonal floods wash the road away and the simple repairs made do not last. A well constructed wash or bridge would provide a durable solution.

1.2 Ishkashim to Wakhan Road

This road runs from the centre of Ishkashim district and proceeds for some 100 km to Khandood, the district centre of Wakhan.

Like many others, this road was built during the time of the monarchy. The road crosses many flood paths, washes and one cliff area, but no rivers. Although its course changes direction quite frequently the road apparently stays open for heavy trucks and four-wheel-drive vehicles. Many of the numerous culverts along the road are in disrepair (most are concrete pipes). We noticed that people allow their irrigation canals to cross the road at random, which slows motor travel.

The road is generally motorable all year long, so long as vehicles can reach Ishkashim and heavy snow does not block the road. There is no urgent need for construction. However it would be a good idea to try to convince communities along the road to use concrete pipes to channel their irrigation canals across the road at designated places. Another problem is that near the village of Wirk irrigation waters form a pool over the road and trucks drive across the adjacent fields to avoid it. An observational survey should be carried out to determine other problems which need addressing and should take place in May 1996. Perhaps remedial action could then be taken immediately after the survey.

From Khandood the road proceeds for about 40 km to Qala-e-Panja village and is very similar to the stretch just describe. It is presently motorable but an observational survey could be very helpful.

The road is no longer motorable from the village of Qala-e-Panja to Sarhad-Broghel, the last village of Wakhan. The previous government had built the road up to Sast village and the Soviets extended it from there. This section has four good motorable bridges, built by the Russians. It is now in disrepair and needs rehabilitating.

The entire road from Qala-e-Panja to the last village needs to be technically surveyed to assess the work needed to make the road motorable again. As it

takes three to four days to walk this stretch, a survey team would need considerable logistical support, including food. The survey might well take six to eight weeks.

We do recommend rehabilitating this road to the last village in Wakhan because more than two thirds of the villages of Wakhan lie along or near it.

There is no road from the last village of Wakhan to the Minor Pamir, just as there is no road from Qala-e-Panja to the Major Pamir. Both Pamirs are very sparsely populated. Building two roads into the two Pamirs would be a massive undertaking. The technical survey alone would be a long difficult task requiring extensive logistical support.

1.3 Roads to Sheghnan

People in Sheghnan use two routes to other districts. One is the summer route through Shewa. They can only use it for four months of the year because of deep snows. When we visited, Afghanistan was just completing the road to Ghar-Jaween village on the edge of the district. The district authorities will build the remaining road from there to Behshar, the district centre. Vehicles will not be able to reach the centre of Sheghnan until three bridges are built at Shakh-dara, Robat and Andiz. The first has been surveyed and designed and the other two were surveyed this year by Afghanistan. Trucks and four-wheel-drive vehicles can sometimes cross the Shakh-dara and Robat when water levels are not high. Even with these three bridges the road will only be passable for about four months each year. Five villages near the road will directly benefit from it.

The other route to Sheghnan is through Ishkashim. It is longer but is passable all year round (during heavy snows travel is slower but apparently not impossible). Building a road to Sheghnan along this route would present difficulties:

- there are a lot of passes (some narrow and difficult) and many cliffs to cross;
- the technical survey will take several months;
- the construction of the road would be a major feat of engineering. It would require a lot of blasting and some large structures. Only a technical survey will clearly show the magnitude and volume of work needed in both Ishkashim and Sheghnan districts. It would take more than a year to build.

This road would serve all the remaining villages of Ishkashim and about five villages of Sheghnan which are not served by other roads.

Some ten or more villages in Sheghnan would still have no road. They are located in an area of Sheghnan called Rowshan, toward the north of the district and bordering Darwaz District. Many of them are three-to-four-days walk from the district centre, sometimes along difficult and dangerous footpaths. If a road was built to serve these villages it would also provide access to the district of Darwaz, which at the moment has no road access at all.

2 IRRIGATION

Generally, all three districts have enough water, but do have problems directing and using it. Some communities face seasonal water shortages.

A lot of water is wasted because of the terrain and the sand and gravel in the soil, and through irrigation methods. The simple irrigation structures are inefficient and lose significant amounts of water through seepage.

Ishkashim

In Ishkashim, the villagers in Sokmal and Bazgir said they experience water shortages in the summer and wanted irrigation structures. We could not work out what was happening and who would benefit. It is possible the shortages were due to more powerful farmers diverting water to irrigate previously uncultivated land which they had newly acquired.

Some villages, including Va-sass and Torbat near the centre of Ishkashim, wanted a canal called Kaafir Joy to be reactivated. They said it had been working about 200 years ago. We could still see its course in some places.

People in Khoshpak and Neecham villages (Khoshpak in Ishkashim is not to be confused with the village of the same name in Zebak district) complained that their source of drinking water freezes in the winter and they have to carry water from the rivers.

Sheghnan

Two villages in Sheghnan expressed a strong need for more irrigation water. The first is Behshar, the large district centre. Villagers want to irrigate some new land in the Khoshk Dasht area, about an hour-and-a-half walk away. Afghanistan had begun to excavate a new canal a few years ago which was abandoned for technical reasons. For the desired irrigation to be feasible, a canal would have to be built higher up. A technical survey would be needed, and the excavation involved would be extensive – it would be a major irrigation scheme. Before undertaking it, we would have to determine how many people would benefit and whether the intended cultivation is in fact feasible. Sheghnan certainly needs every square metre of ground it can cultivate, old or new.

The other village is Viar which has three irrigation canals, one which was partly built and rehabilitated by Afghanistan. People still complained that there was not enough water at seasonal peaks. The canals do have some seepage. We recommend further study of the problem, including the amount of land, the number of potential beneficiaries and their views.

In Dehmurghan village, just to the south of the district centre, the Amu Darya has flooded and washed away a lot of valuable agricultural land (more than 20 hectares). Groynes and other structures built on the Tajikistan side of the river to protect their land have aggravated the problem on the Afghan side. Last year, with WFP's help, the Sheghnis did build some groynes and other structures but the designs and materials were local and were not strong enough. The structures were quickly washed away. A technical survey should be carried out and the required structures should be built to protect the remaining agricultural land. We were told water levels are lowest in late August and September.

Other villages would also benefit from measures to protect them from the Amu Darya and in due course could also be considered.

Wakhan

Only one village in Wakhan, Wirk, is so short of water that it has to distribute it by turns in the summer and appoints a water controller to supervise the distribution. At Rorung village a canal brings water along a difficult course on the side of a steep stony hill. A couple of years ago an earthquake severely damaged the canal. The community had made a remarkable repair, using branches interwoven with stones but no cement or masonry, and it was still holding. However, the structure is fragile and wastes a lot of water. If cement could be brought to the village, the canal could be rebuilt to a stronger design, with a concrete cover to protect it from damage by stones and from silting by gravel.

Education

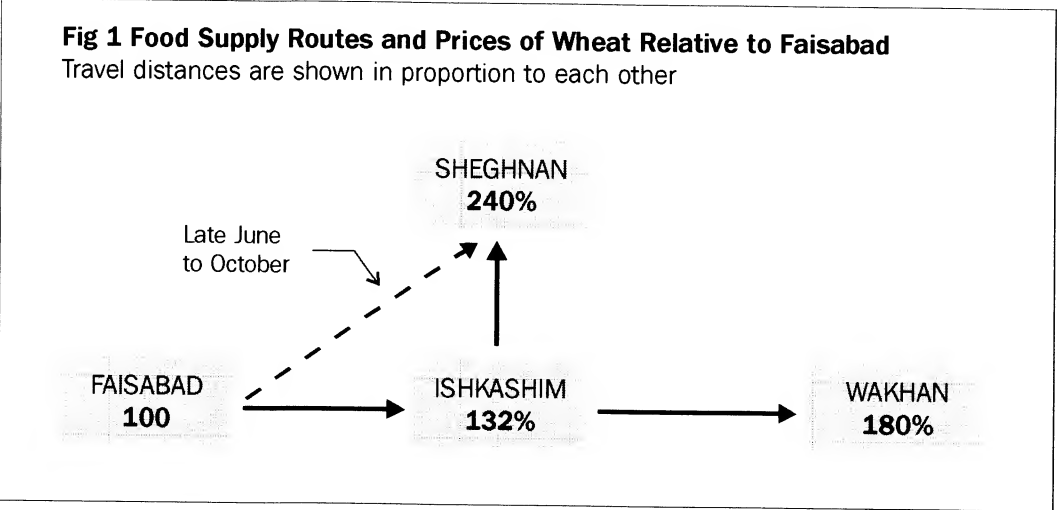
Badakhshan was said to have had one of the highest rural literacy rates in Afghanistan, and Sheghnan district had been well known as an exporter of teachers to other parts of the province and country. As elsewhere, the education system in the three districts has drastically deteriorated since the Mujahedin rule: school buildings falling down, teachers paid rarely if at all, equipment and textbooks in short supply, and standards dropping sharply.

The three districts have lost most of their access to higher education in places like Kabul and Mazar. In spite of these setbacks and the lack of prospects, most people remain enthusiastic about and eager for education.

Communications and Transportation

Many people in the districts (particularly Sheghnan and Wakhan) considered the lack of roads and access a root cause of many of their problems. Until Afghanistan completed a road link to the district in August 1995, Sheghnan had no road link to the rest of the province and accordingly paid the highest price among the three districts for imported food. There is one road connecting Ishkashim to the province's capital but it is in very poor condition and frequently blocked by rising rivers and snows. The road continues from Ishkashim to Wakhan, which is thus entirely dependent on the same road link, and is very vulnerable to snows because of its altitude.

The difficult access and the high cost of transportation add dramatically to the cost of basic goods which have to be imported into the districts, as can be seen from this diagrammatic comparison of wheat prices:



Food prices rise sharply in response to road conditions (wheat prices, for instance, went up by 36% in ten days in Ishkashim when the road from Faisabad was blocked by high water levels in July 1995). The only telecommunications in the three districts are one telephone line within Wakhan.

Other Government Services and Agencies

The districts have long suffered neglect by government and other agencies. Apart from Afghanistan, other agencies with some presence in the area are the

Norwegian Afghanistan Committee and ORA International. UNICEF and WHO occasionally provide supplies, and WFP funds food-for-work projects in the area.

2.9 The Tradition of Self-Help and Scope for Social Change

Given their very limited resources and present know-how people in these districts by and large seemed to us to be making the best of their extraordinarily difficult conditions. Not surprisingly, many people seemed worn down by the grinding poverty and endless problems of their lives, but we also met significant numbers of people who seemed to have a will to question and to change their lives. Local authorities were keen to co-operate with us, and are eager to help. Security in the area is consistently good.

2.10 Major Constraints to Meeting Basic Needs

In all three districts the main obstacles to meeting basic needs are:

- shortage of agricultural land;
- poor soil;
- pests, crop and animal diseases;
- inefficient agricultural practices;
- lack of roads and inaccessibility;
- lack of health facilities and basic health knowledge;
- opium addiction;
- altitude and climate.

Some of these constraints, such as climate and altitude, cannot be tackled directly. But there is scope, for example, to change practices to improve yields and make crops and animals less vulnerable to the climate.

3 RECOMMENDATIONS

The urgent priorities that communities expressed were for roads, tackling health problems, food, and the treatment of addiction. The order varied but the same needs were articulated village after village in all three districts. Food received consistently more stress in Sheghnan and Wakhan.

There is no one simple way to unravel such a tightly woven fabric of poverty. Nor will short-term activities make any lasting improvements to people's lives. Any agency which wishes to help these communities address their problems will need to live with people in the area for some time, take a multi-faceted approach, and carefully examine the long-term impact of their activities.

3.1 Improving Agriculture and Animal Husbandry

Agriculture and animal husbandry are the two main and most tangible ways in which people in these districts can make a living, and therefore need particular attention. With some outside guidance and support, the communities we visited have the experience and the will to make improvements in both sectors.

Increasing Agricultural Production

Food security can be improved through measures to increase the yields of crops and reduce their vulnerability to cold and disease. These measures may still not however increase agricultural food production sufficiently to cover needs in Sheghnan and Wakhan. Nevertheless, apart from putting more food into the local system, increasing food production would help to reduce food prices and to redress adverse terms of trade, particularly in Wakhan.

Improving Animal Husbandry

The pastures available in Sheghnan and Wakhan give scope for increasing animal husbandry there (albeit the difficult problems of overwintering have to be overcome). Animal husbandry seems to offer better prospects than agriculture for making good the food deficit in these districts. With improved techniques it should be possible to increase the numbers of livestock as well as their products. More livestock can then be traded to meet food shortfalls.

Pastures are more limited in Ishkashim, but are compensated for by the greater scope to increase agricultural production there. Since animal husbandry is the sole occupation in the Pamir, measures to improve it are essential in that area.

Any measures to improve animal husbandry should take great care to involve women, whose traditional roles in the activity may otherwise easily be usurped. **We therefore recommend a more technical and specialised study of the needs, problems, and practices of animal husbandry and appropriate measures to improve it.**

3.2 Generating Income

Activities such as handicrafts might provide more income, but there may not be a ready market for the products and the activities need further study. Other ways of generating incomes should also be explored (Afghanaid has, for instance, successfully introduced beekeeping to other parts of Badakhshan).

Given the number of woman-headed households in the area, it is particularly important to target women for income-generating activities, especially widows and wives of migrant workers.

3.3 Reducing Expenditure

Given the difficulties of increasing food production and of generating incomes, it is important to consider ways in which families could make savings through which they could purchase more food with their current resources. Ready targets for reducing expenditures might be:

- adverse terms of trade.
- high transport costs (see 3.4 below);
- the cost of opium addiction (see 3.5 below);

Improving terms of trade

It should be possible to improve the bargaining power of households and reduce their dependence on itinerant merchants. Growing more food locally and



REPORT ON A RAPID RURAL APPRAISAL

carried out in ishkashim, sheghnan and
wakhan districts of badakhshan province,
afghanistan, from june to august 1995

Afghanaid

COVER PHOTO: Zibedena of Arakht village, Sheghnan district, who had 21 children of whom only four survived. "I'm really happy to have had so many children," she told us. Photo by Sippi Azarbajani-Moghaddam.

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